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VORA & CO. PUBLISHERS (PRIVATE) LTD.,

3, Round Building, Kalbadevi Road, Bombay 2.

THE INDIAN RURAL PROBLEM

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and
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*FIFTH EDITION
LARGELY REWRITTEN*



THE INDIAN SOCIETY OF AGRICULTURAL ECONOMICS

BOMBAY

1960

<i>First Edition</i>	1944
<i>Second Edition</i>	1945
<i>Third Edition</i>	1947
<i>Fourth Edition</i>	1951
(enlarged)	
<i>Fifth Edition</i>	1960
(largely rewritten)	

NOTE

The views herein expressed are the authors' own views and the Society is not committed to them. The Society is open to members from all walks of life and of all shades of opinion. It does not, as a body, subscribe to any particular views or opinions.

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PRICE : RUPEES TWENTY

PREFACE TO THE FIFTH EDITION

This book was first published in 1944 at a time when political and economic conditions in the country were very different from what they are to-day. The purpose of the book, at the time of its first publication, was to present a broad picture of the social and economic structure of rural India with the help of such information as was available then. Our analysis led us to the conclusion that the multiplicity of rural social and economic problems was only apparent and that basically the Indian rural problem was one — viz., that of raising the standard of life of the rural masses. The need at the time was to get a broad, co-ordinated approach accepted, and our main thesis was that the State had to accept positive responsibility for initiating rural development, on the one hand through its own legislative and administrative action and, on the other, through the promotion of local self-governing institutions.

Momentous changes have taken place in the political and economic life of the country over the last two decades. With the advent of political Independence, the national Government has adopted a policy of planned economic development of the country. Many of the ideas put forward in the book have become part of accepted policy. If we were to write the book afresh, we would, undoubtedly, write it differently. But, books, like individuals, have their own careers, once they are launched. There has been continuing demand for a new edition of the book. We have tried in this edition to revise and rewrite considerable portions of the book. We have made use of the latest data available. We hope the book in this new form will be useful not only to students but also to the wider public interested in the Indian rural problem.

We wish to record our warm appreciation of the work done by Shri T. R. Sundaram, Junior Research Officer of the Society, in the preparation of this revised edition. We highly appreciate his extremely painstaking assistance in compilation of data and his careful and intelligent study in collating them. His devotion and industry in bringing out this edition are very commendable.

We are most grateful to the Examiner Press for the excellent work they have done, despite irritating — though unavoidable — delays on our part in sending them the manuscript.

Bombay,
September, 1960.

M. B. N.
J. J. A.

PREFACE TO THE FOURTH EDITION

Since the publication of the third edition of this book in 1947, momentous changes have occurred in India and the world over with their inevitable impact on the problem of rural economy. New problems like persistent shortages of food and industrial raw materials and the continuance of inflationary pressures have assumed a special urgency. The Indian economy has been thrown into a serious state of imbalance as a result of the War, the Partition and merger of former Native States in the Indian Union. The attainment of political freedom has given new opportunities for tackling these problems with vigour and confidence and it is particularly necessary at this stage that measures adopted to meet the immediate problems have also an eye on the more long-term social objectives which alone can give meaning and content to political freedom. The approach to the Indian Rural Problem indicated in this book, we feel, still retains validity. The need to revitalise the village through the introduction of multipurpose co-operative societies, panchayats and schools and to improve and strengthen the administrative system especially at the points where it touches the rural population has been brought out even more clearly than before by the developments of the last few years. The basic problem of Indian agriculture has been and is how to secure a substantial increase in productivity. While an improvement in the techniques of cultivation and allied processes is essential for securing this improvement, the problem cannot be solved except through the sort of integrated sociological approach which it has been the object of this book to propound. Indian agriculture as at present organised does not respond easily to expansionary stimuli. Neither the farm nor the farmer is in a position to benefit from piecemeal measures of assistance or encouragement. The correct approach to the problem lies through a "combined operation" in which technical aid, organisational improvements, finance and extension services are all mobilised effectively so as not only to secure an increase in production but also to provide the basis for a more dynamic economy and a better way of life for the rural producer.

In view of the big political and economic changes of the last few years, the time has come for completely re-writing this book. It is regretted that this has unfortunately not been found possible.

An additional section at the end reviews briefly the effect of the War and the Partition on land utilisation and crop pattern, surveys the major developments in agrarian reforms, and sketches briefly the government plans in respect of land reclamation, river valley schemes, etc. It is hoped that this addition will make good partially the obsolescence of some of the material contained in the book. The authors are fully aware of the need for "a completely new and revised edition" and they hope to commence work on it in the near future.

Bombay,
January, 1951.

M. B. N.
J. J. A.

PREFACE TO THE THIRD EDITION

We should like to place on record here our sense of appreciation of the cordial reception accorded to the first and second editions of the book by the public as well as the reviewers. Four momentous years have elapsed since the first edition was published and we should have liked to take this opportunity for appraising recent developments. The third edition is, however, going out as a reprint of the two earlier editions, for the available information relating to post-war years is far too sketchy and the developments yet to come far too uncertain to warrant definitive changes in the text. While it is true that over the last few years a great deal of thinking has been done on the planning of agriculture and the rural economy, we have as yet no plans fully worked out and ready to be implemented. The structural bases of agricultural and rural life remain the same as before the war.

In two important spheres, *viz.*, irrigation and land tenures, vital developments have already been initiated. Details are being worked out for large irrigation projects, such as the Kosi Project, the Damodar Valley Project, the Mahanadi Project, the Tungabhadra Project and the Narbada and Tapti Projects, which, when completed, are estimated to add 25 million acres to the existing 70 million acres of India's land under irrigation. Besides bringing vast tracts of barren soil under cultivation, these projects would also generate power to the extent of 4 million kilowatts as against only half a million produced currently. In the predominantly

Zamindari provinces, Governments have decided upon abolishing the Zamindari tenure, and, in some, special Committees have been appointed to work out the necessary procedure for implementing this reform. But it will be some time before the benefits of these two important measures actually begin to accrue to the people. In the meanwhile, the breaking up of India's political unity is apt to create new problems. The post-war plans, hitherto envisaged, have been built on the assumption of continued political unity. These plans will have to be re-adapted to the changed circumstances. We have thought it best, therefore, not to attempt an enlargement or revision of the text at this stage.

Bombay,
November, 1947.

M. B. N.
J. J. A.

PREFACE TO THE SECOND EDITION

The publication of a Second Edition which is *not* revised and enlarged but is just a reprint of the first seems to call for an apology. The decision is deliberate. Since the first edition was published, there have been some developments in regard to some of the problems discussed in this book which we had thought at first of commenting upon. The Government of India as well as some Provincial Governments have published plans for the development of agriculture and the promotion of rural welfare. These deserve a careful appraisal. The purpose of this book, however, has been to set out the fundamentals of the Indian Rural Problem and to indicate the general lines of solution rather than to review specific legislative measures and plans. On a balance of considerations, therefore, we have decided to reissue the book in the present form in view of the persistent demand for it. We would like to add that the reviewers have been very generous in their appreciation of this volume and we have hardly received any critical suggestions for improvements. Some readers have, however, suggested the need for including an index and we have, therefore, given at the end a subject index, an author index and an index of reports cited.

Bombay,
May, 1945.

M. B. N.
J. J. A.

PREFACE TO THE FIRST EDITION

This is the first publication of the Indian Society of Agricultural Economics undertaken in pursuance of its new programme of activities adopted by the Executive Committee in June, 1942 and endorsed by the General Annual Meeting at Walchandnagar in December, 1943. As regards the problem dealt with in this study I need not say anything here as the relevant points are set out in the Authors' Introduction.

It is only necessary to point out that the views herein expressed are the authors' own views, and the Society as such is not committed to them. The Society is open to members from all walks of life and of all shades of opinions. It does not, therefore, as a body, subscribe to any particular views or opinions.

This publication is to be followed by several others which have already been projected. It is hoped to bring out in the near future a volume dealing with the Land Problem of India — the problem which, as the present work seeks to show, is the most vital of all our rural problems. Several scholars and experts have already started working on the problem in their respective regions, and it is our intention to bring these together in one volume so as to present a picture of the conditions all over the country. The volume will be edited by Prof. D. R. Gadgil of the Gokhale Institute of Economics and Political Science, Poona.

The Society has also planned a series of general monographs on the rural life problems of different Provinces and States and we hope to publish at least one of these, which has been almost completed, in the near future. This as well as the other regional studies which will follow have all been planned along the lines of the monographs prepared by the various European Governments prior to the calling of the European Rural Life Conference of 1939.

(Sir) MANILAL B. NANAVATI,

President,

Bombay,
April, 1944.

Indian Society of Agricultural Economics.

INTRODUCTION TO THE FIRST EDITION

It is not difficult to say what the Indian Rural Problem is. At bottom it is none other than that of raising the standard of life of the rural masses. During the last twenty-five years, there has been a considerable growth of industries in India, but this has made hardly any impression on our standard of life, more especially in the rural areas. Industrialism in this country, has been an exotic growth, super-imposed upon an unprepared and undeveloped economic structure. Our industrial progress has been slow and lopsided; the few large-scale industries we have are concentrated in the cities. We have failed to develop the basic and key industries which are the very corner-stone of the industrial edifice in the advanced countries of the world, and the need for developing small-scale and cottage industries has been realised only lately and slowly. As to agriculture, it remains as backward and primitive as ever. The productivity of agriculture has not increased; in certain respects, it is possible, it has actually decreased. As India lives in her villages, and agriculture is the very backbone of her economic life, we must devote all our efforts to solve the rural problem. The objective is to increase the income of the rural population so as to improve its standards of nutrition, sanitation, housing and education, and this presupposes certain social, political and administrative changes. For one who knows our rural life and its problems, this is no easy task. Agriculture, it has often been said, is not, for our farmers, a business proposition, but a way of life. A way of life cannot be changed by half-measures and piecemeal efforts. It presupposes an all-round, well-planned and co-ordinated effort on the part of the authorities responsible for the well-being of the people.

The root cause of the low productivity of Indian agriculture is our failure to apply modern science to it, but before this could be done, extensive measures for the reform of the land system are necessary. The great economic transformation in European countries during the eighteenth and nineteenth centuries was brought about by the adoption of a new system of crop rotation, better methods of sowing and reaping, the use of chemical manures, and, in general, the application of new scientific knowledge to all

the related aspects of the economy. In the process, new economic institutions developed and the entire way of life was altered. In this transformation, the State played a prominent part. Behind what we call the Industrial Revolution, there was not merely a new technique, but also a new spirit, a spirit of innovation, adventure and experiment. A number of factors, political and social, conditioned the manner in which and the tempo with which the transformation took place in different countries, but in ~~essence~~ the motive force behind it was the same — a desire to go forward, to raise the standard of life so as to turn the economic struggle from one for bare existence into one for a competence and a surplus.

The peculiar circumstances under which industrialism was introduced into this country generated, on the other hand, a spirit of defeatism, and despair among the people. They could not comprehend these "miracles" of science. While the railway and the telegraph brought them face to face with world forces, their technique, outlook and mode of life remained generally unaffected. The old balance between agriculture and industry was destroyed; the villager found his subsidiary industries ~~decay-~~ing; there appeared nothing in their place he could take up, no alternative avenues for employment. The result was more and more ruralisation, more and more dependence on agriculture, more and more pressure on the soil. A few cities and towns grew richer, but the rural areas generally sank into greater poverty, from which there seemed to be no escape.

Indian economists, following in the footsteps of Gokhale and Ranade, were not slow to recognise this peculiar character of the economic transition in India. They noted the peculiar difficulties of the Indian problem and tried to point out the absurdity of following in India a policy which may be good enough or just fashionable for England. The policy of the Government of India has been on the whole but little affected by the criticisms or suggestions of our economists. Even the suggestions and recommendations of their own Committees and Commissions have not been fully implemented. The various Famine Commissions of the third quarter of the last century pointed out the seriousness of the agrarian problem, but until about the end of the last war, almost nothing was done either to reorganise agriculture on a

new scientific basis or to foster industries, large scale, so as to relieve the pressure on the land and to increase the national income. It is true that the Government had a Famine Relief policy and that they developed railways and irrigation which have reduced the severity of famines. Such measures were, however, quite inadequate to the needs of the situation. In 1919, agriculture became a transferred subject, but the limitations of Dyarchy, especially ~~in the~~ field of finance, made any radical improvements impossible. It was in 1926 that the Royal Commission on Agriculture was appointed to review the entire field comprehensively and indicate lines of progress. This Report is a landmark in the evolution of agricultural policy in India. Its recommendations covered almost every aspect of rural life, and it seemed as though the Government of India had at last decided to take a more active interest in our rural problem. However, several important topics were excluded from the scope of the Commission's enquiry, such as land reforms, irrigation cess, and inter-departmental co-ordination. It was expected that a separate Commission would be appointed later to deal with these aspects, but that was not done. During the two decades thereafter we have advanced negligibly, if at all; for close on ten years, our agriculture was in the grips of the Great Depression. The popular Ministries of 1937 in the Provinces took up the problem in all earnestness and with determination, but the war supervened and found us quite unprepared and unorganised to face its manifold problems. At a time when a country like England with a large food deficit is able to feed its people fairly satisfactorily, we in this country were confronted with a complete debacle. The Government of India hesitated between control, decontrol and partial control; the various Provinces were unable to evolve a co-ordinated policy in the higher interests of the country. More recently, a more comprehensive policy has been formulated with reference to war-time needs. The Government of India have also appointed a Long-term Agricultural Policy Committee to go into problems of post-war reconstruction and development, but this Committee has not met so far. It is evident that so long as the Government of India do not change radically their entire outlook on and policy in respect of our rural problems, no satisfactory solution is possible. If freedom from want is going to be the basis of the new economic order after the war, it is necessary to assure at least a bare minimum to India's teeming millions.

It has often been said that agriculture in India is on a deficit economy. We find on our hands an antiquated land system which leaves no impetus for the tiller of the soil; we have all the evils of a feudalistic system with none of its redeeming features. There are far too many people on the land; land holdings are getting smaller and more and more scattered; the system of agricultural finance through co-operative societies has failed to help the agriculturist substantially; there is no adequate road system for ~~transport~~ port, no proper grading or standardisation of agricultural produce; land taxation is iniquitous, and no organisation exists to look after our rural problem in all its economic and social aspects. Co-operation has been tried, without much success; there has been some piecemeal tenancy legislation in respect of a few selected areas. The Agricultural Research Institute at Pusa, the various Agricultural Colleges, the Imperial Council of Agricultural Research, the Indian Central Cotton Committee and the Central Jute Committee and of late the Agricultural Credit Department of the Reserve Bank of India have undoubtedly been doing some valuable research work. Some of the Indian Universities have courses of instruction in rural economics and their Economics Departments have, even with their meagre resources, done some amount of research work on rural problems. It is, however, symptomatic of our general apathy to this vital problem of rural reconstruction, reform and planning, that hardly any of our Universities has a Chair in Agricultural Economics with specialised staff and adequate equipment. All this contrasts very unfavourably with the work done and being ~~done~~ even in these abnormal times in countries like the U.K. and the U.S.A. A few public bodies and organisations, like the Servants of India Society, the All-India Spinners' Association, the All-India Village Industries Association, the Harijan Sevak Sangh and the Kisan Sabha have done some work in the field, partly of a practical nature and partly of the research type. But, research and new knowledge have not yet fertilised our agriculture or penetrated to the actual farms.

It is not the object of these preliminary remarks to point out what can be done and must be done here and now, but merely indicate the gravity and urgency of visualising our rural problem as a whole and to make out a *prima facie* case for an active State policy in this regard. There is no better agency for the necessary

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comprehensive planning than the State, and this, under our conditions, means ultimately the Government of India, for this is truly a matter which concerns the "peace, safety and tranquillity" of the country.

We would also emphasise in this connection that a proper policy on the part of the State must include in it as a basic plank the question of land reform. Unless the system of land tenures and land holdings with the attendant evils of absentee landlordism, sub-infeudation and tenancies, feudal levies and exactions and subdivision and fragmentation of holdings is altered, it is not possible to increase the productivity of the land. Several European countries were faced with similar problems during the nineteenth century, and they tried to reform their land systems by suitable legislative and other measures, thus making famines to a large extent a thing of the past. Most of these countries have favoured the system of peasant proprietorship and have sought to rehabilitate the peasant so as to make him more efficient, more contented and more enlightened. The land systems in India have had a long evolution; there are diversities and complexities as between the different parts of the country. The methods of reform will have to take all these into account. But there can hardly be any doubt that so long as the ownership, distribution and utilisation of land are not so planned as to make for economical cultivation, other reforms can hardly help the agriculturist except perhaps in a small way.

For voicing the grievances of our industrialists and businessmen there are Chambers of Commerce and Industry, Mill Owners' Associations and the like, which make suitable representations to Government from time to time and manage to get a hearing. Our rural masses are truly dumb. Their sufferings may be a fruitful source of sporadic agrarian riots or smouldering discontent, but there is no definite organisation of peasants themselves to mobilise knowledge, create and educate public opinion and lay down policies in the interest of an ordered growth and reconstruction. A rural reform programme must therefore include the promotion of peasants' organisations and the training of leaders from among the villagers.

A word now about the object of this study which is the first publication under the auspices of this Society. The object of

this study is to review the Indian Rural Problem in its general aspects, so as to enable us to visualise it as a whole and to sketch out the general lines of the policy which the State must follow. If it is true to say "Industrialise or Perish," it is equally important also to remember that we have to modernise, rehabilitate, revitalise and rebuild our rural economy in harmony with the needs of the economy as a whole.

Indian public opinion now thinks in terms of a country-wide all-embracing planning, but we have not attempted to offer in this book anything like a definite Plan for Agricultural Development. That task requires the co-operation of experts from different fields, and one cannot think of a plan for Agriculture apart from a plan for Industries, Communications, Housing, Electrical and Engineering Development, Education, Social Services, etc. In any case, we hope, we have made in the course of this study a number of suggestions which will be useful to any representative and authoritative body which takes up the task of formulating a proper plan. We should only add here that perhaps the most essential part of any plan is the personnel. However sound a plan may be on paper, it cannot reach fulfilment unless its operation is in charge of the right kind of personnel. For this reason, we have laid ample stress on administrative reform and on the need for revitalising village life through appropriate agencies and institutions. This work can begin and ought to begin right now. "Full-dress" planning may have to wait till we have a national Government at the Centre but there are many problems in respect of which it is possible for, ~~may~~ incumbent on, the present Government of India to take the initiative. Some of the Provincial Governments have already started building up Post-war Reconstruction Funds, and if the Government of India help them with suitable grants-in-aid and technical advice, beginnings in the right direction can be made at an early date.

This volume is divided into three parts. Part I states concisely the facts of the situation. In this part comment is eschewed or reduced to the minimum. Part II reviews the activities of the various Government Departments and public and semi-public bodies, and attempts to assess the adequacy or otherwise of the work so far done. In Part III are set out the essentials of a proper

policy, embracing not merely economic but, of necessity, the broader sociological aspects of the rural problem. The approach adopted here is more practical than academic, and the suggestions made are born of the varied personal experience of one of us. There are possibly some important topics which we have left out, but that perhaps is inevitable when we are dealing with a problem so vast and intricate. To be able to do justice to many of these problems, a much more intensive study is necessary than we have undertaken here. The present volume is thus a sort of general introduction to the other more specialised studies planned to be undertaken in course of time by this Society.

Our thanks are due to Professor C. N. Vakil, Director of the University School of Economics and Sociology, University of Bombay for placing at our disposal all the facilities for research available in the institution and for also having lent us, when necessary, the assistance of his research staff. We are also grateful to the Reserve Bank of India for similar help. They have given us ready access to the books and other material available with them. The office staff of this Society has, of course, borne their share of the burden of collecting the necessary data and preparing notes on the various topics dealt with in this volume. They have also done the arduous work of going through the proofs. Mr. B. S. Mavinkurve, who has been with us from the time this work was commenced, has rendered valuable assistance at all stages, and Mr. S. Thotapalli has also not spared himself, though he joined us later, and had other work to attend to. To both these, then, our cordial thanks are due.

Bombay,
April, 1944.

M. B. N.
J. J. A.

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ERRATA

<i>Page</i>	<i>Line</i>	<i>Incorrect</i>	<i>Correct</i>
40	9-10	agricultural labour families	cultivating labourers (self-supporting)
77	Table III column 5	2.6 to 50	2.6 to 5.0
162	Footnote 2	p. 57	p. 51
321	Para 2, line 5	perceives	receives

PART I
THE FACTS

CHAPTER I

ENVIRONMENT AND RESOURCES.

India is often called a sub-continent.¹ It is ten times as large as the British Islands and nearly equal in area to the whole of Europe, excluding Russia. Geographically India is an intelligible isolate. The boundaries are clearly marked off from the rest of Asia by a broad no-man's land of mountain ranges. The critical area for human contact is in the north-west hills (Pakistan) which has served as the gateway for breaking the isolation of the country. The human heterogeneity that is found in the country is the result, not only of the cultural contacts that have been established through centuries, but also more of purely geographical factors which confirm the generally accepted description of India as a sub-continent.

NATURAL REGIONS

On the North, the snow-capped Himalayan and mountain ranges form a natural border. The entire land frontier from West to East covers about 1,500 miles. Southwards, the land, with a coastline of about 4,300 miles gradually tapers into the Indian Ocean. Within the borders, the sub-continent falls into three macro-regions ; the Extra Peninsular mountain wall ; the Indo-Gangetic Plains and the old Peninsular Block. The Himalayan ranges exercise a dominating influence both on weather and vegetation of the country. The Indo-Gangetic Plain, stretching from the valley of the river Indus in the West to that of the river Brahmaputra in the East, composed of rivers and silt, forms

1 The term 'sub-continent,' used in a general way, indicates merely the "size and numbers." But it must be distinguished from the political entity of 'India' as the name of a State. Even for purposes of geographical study the Indian sub-continent has undergone a change after Partition. The lands which until August 15, 1947, formed the Indian Empire were divided into the Republic of India and the Dominion of Pakistan. In spite of its partition into two great States, 'India' remains valid as a geographical expression to denote a sub-continent. Accepted authorities on geography ignore the political division in studying the physiographic features of the area and maintain that the term 'India' still refers to all the lands between Cape Comorin and the towering peak K2 respectively in 8° and 36° N.

Cf. India and Pakistan, A General and Regional Geography (1954), O.H.K. Spate.

the most extensive sheet of level cultivation in the world. The Peninsular block in the South is an elevated plateau flanked on each side by the coastal ranges—the Western and Eastern Ghats—and separated from the North of India by the Vindhya and Satpura ranges. Even these main regions contain a multitude of distinctive divisions within themselves determined by factors of climate, soil aspect and hydrology. Although the transitions are almost imperceptibly gradual, the extremes are also significantly noticeable, from the desert environs of Karachi (Pakistan) to the almost unbelievably dense stipple of homesteads between Calcutta and Dacca (Pakistan). Underlying the physiography of India is one great common factor, *viz.*, the rhythm of the monsoonal year.

RIVERS

The Indo-Gangetic Plain is traversed by two great river systems, one comprising the five Western rivers which gave the Punjab (of the undivided India) its name and the other of seven Eastern rivers including the Ganges and Jumna. The great crescent of alluvium from the delta of the Ganges represents the infilling of a foredeep warped down between the stable Gondwana block and the advancing Himalayas. The Peninsula in the South is drained by seven main rivers. There is a strong contrast between the rivers of the Himalayas and those of the Peninsula. Erosion is extremely active and vast quantities of silt are brought down. Most important of all, the rivers in the north flowing down from the Himalayas are not dependent on the monsoon rainfall alone for their water-supply. The melting of the snows makes the rivers perennial. This is the more valuable as it comes at the height of the hot weather—February to April—when the Peninsular rivers are lowest. By contrast, the latter entirely depend for their water supply on rainfall which is concentrated in five or six months of the year. They flow in torrents during the monsoon but shrivel up in the hot weather and are almost dry. Hence they are of much less use for irrigation than those of the North. Where irrigation is possible they need a proportionately much greater capital expenditure for the construction of barrages and reservoirs. Thus, large-scale river irrigation was almost confined to the deltas of the East Coast. Hydro-electric locations were also rarer in the Peninsula.

CLIMATE

India is pre-eminently a land of tropical monsoon climates.² Though the continental climatic variations affect the upper air, the land is sufficiently massive to develop its own individual system of monsoons. The Indian Meteorological Department recognises four distinct seasons, the North-east and South-west monsoon seasons (December-March and June-September respectively), the transitional hot weather (April-May) and the transitional period of the retreating South-west monsoon (October-November). In the summer months, June-September, the flow of winds is generally from the sea to the land and the season is one of high humidity, cloud and rain. Based on these climatic variations, there are two main agricultural sowing seasons, June-July and October-November.

"In all that depends upon climate the different parts of India exhibit very great diversity the term Indian climate means little more than that, on a general average of the year, the sun is higher in the heavens and the temperature some degrees greater, than in Europe."³ In the northern region, Assam in the East and Rajasthan in the West present a contrast of dampness and dryness greater than that shown by the British Islands and Egypt. Again in the Punjab, the continental climate has a pronounced influence with extremes of heat and almost freezing winter cold, while in Travancore in the South an almost unvarying heat with great humidity prevails throughout the year. Over most of India, the cold weather is almost rainless, except for occasional late monsoon storms. Except in the North-west where June is the hottest month and July only 2-4° lower, mean temperatures in the rains are nearly everywhere distinctly lower than in May. Even where there is little rain, there is generally a good deal of cloud and the lower temperatures are offset by higher humidities.

The hill stations register a cooler atmosphere and on the average are damper than the neighbouring plains. Nearly all hill

² In meteorological literature the word 'monsoon' refers to the great air currents of winter and summer, the north-east and south-west monsoons respectively. The use of these directional terms is however not appropriate to the winds over India. Possibly the usage is a hang-over from the old sailing ship days.

Cf. India and Pakistan, O.H.K. Spate, p. 41.

³ *Vide* Blandford, The Climates and Weather of India, Ceylon and Burmah (1889) pp. 96-97.

THE INDIAN RURAL PROBLEM

stations lie at about 6,000 to 7,000 feet except for the minor ones at 3,000 to 5,000 feet in Central India such as Pachmarhi. The places which lie between the hills and the plains have a cooler climate than the latter but the atmosphere is usually oppressive as these areas lie in valleys without much movement of air.

When the climate of India is described often as sensible, the reference is to weather rather than to climate. The regularity of the occurrence of these weather conditions makes for an easier adjustment of physiological and social factors in India. On the whole, for most people "it isn't the heat, it is the humidity that counts" up to 100 degrees or so at least.

RAINFALL

By far the greater portion of rainfall in India is under monsoonal dominance. The south-west monsoon from June to October accounts for nearly 75 per cent of the country's total annual rainfall and is the chief source of water-supply for most of the Peninsular areas and over almost the whole of North-India. The retreating monsoon brings a heavy rainfall to the south-eastern portion of the Peninsula between October and December. The areas in Madhya Pradesh and Hyderabad also receive during this season a few showers which are of great value to the wheat growing districts in these regions. Though winter is usually without rain in Northern India, some parts of the extreme North-western districts receive some rains during this season. The cold weather rain, though not heavy, is important as the winter crops, especially wheat and barley, depend largely upon it.

The monsoon rainfall varies as between the different parts of the country. The normal annual rainfall is 42 inches and variations from this normal are as great as +12 inches and -8 inches. The regional contrasts in precipitation are most striking. Cherrapunji in Assam receives an annual average of 428 inches while parts of Rajasthan get less than 7 inches. The amount of rainfall is below 20 inches over a large part of Central India and East of the Peninsula and is only 5 inches in South Madras. The pattern of distribution varies considerably even over short distances in accordance with local topography and the location of the place *vis-a-vis* the two great branches of the monsoon. Besides these variations,

as between different parts of the country, in the same region the rainfall varies from year to year.

Broadly speaking, India has a cycle of 5 years in which one year is good, one bad and three are indifferent. The variability of rainfall largely determines the productive efficiency in agriculture. It is obvious that the usefulness of the rainfall in India for agriculture and for hydro-electric development is limited by its concentration over 5 months of the twelve. Taken as a whole, agriculture in areas with under 15 to 20 inches rainfall is practically entirely dependent on irrigation. Intensive cultivation in these areas demands very expensive major works. Only areas which have over 45 to 50 inches of rain are normally free from drought. The dates and character of the early rains have also a determining influence on agriculture. Even if the total amount received in a given year is satisfactory, if the monthly distribution is not adequate, especially when the rains are late, the results may be as bad as those of a complete failure. The areas on the flanks of the main monsoon branches are particularly liable to such risks, *viz.*, Gujarat and the southern margins of the upper Gangetic Plains. Areas with 25 to 35 inches are even worse off than the really arid North-west regions since the rainfall is only precariously adequate for cropping. In these marginal regions there may be more good years than bad but a continuous run of two or three deficit seasons would spell disaster.

Table 1 shows the distribution of rainfall and the variations from the normal. It is on account of the above aspects of seasonality that Indian agriculture has been described as "a gamble in the rains." "In consequence of this character of India, in common with tropical rainfall generally, it is less penetrating in proportion to its quantity than in countries where much of it falls in a state of fine division allowing time for its absorption by the ground. Instead of feeding perennial springs and nourishing an absorbent cushion of green herbage, the greater part flows off the surface and fills the dry beds of drains and water courses without temporary torrents."⁴ The effects of such flooding and erosion are indeed damaging.

⁴ Blandford, p. 76.

TABLE 1
DISTRIBUTION OF RAINFALL IN INDIA

Sub-division	Number of Years when Monsoon Rainfall (June-September) was									
	Below Normal					Above Normal				
	1900- 1910	1910- 1920	1921- 1930	1931- 1939	1940- 1950	1900- 1910	1910- 1920	1921- 1930	1931- 1939	1940 1950
Assam ..	1	1	1	Nil	Nil	1	3	1	1	Nil
Bengal* ..	3	1	2	2	1	2	3	2	2	1
Orissa ..	3	1	2	1	1	2	4	2	3	2
Chota Nagpur ..	2	4	Nil	3	2	3	4	4	2	4
Bihar ..	3	1	3	1	2	3	5	3	2	Nil
U.P., East ..	5	4	2	2	4	Nil	3	5	1	1
U.P., West ..	3	5	3	3	2	1	2	4	1	4
Punjab (E & N)	5	5	4	5	3	5	4	3	2	3
Kashmir ..	4	6	6	6	3	4	3	1	1	3
Rajputana, West	5	5	5	2	4	3	2	3	3	5
Rajputana, East	3	5	4	2	2	3	3	3	4	7
Gujarat ..	3	4	3	3	2	Nil	4	3	2	5
C. I., West ..	3	5	4	Nil	1	2	3	2	4	7
C.I., East ..	5	3	3	3	4	4	3	5	2	3
Berar ..	4	5	3	1	2	4	4	1	7	5
C.P., West ..	4	3	Nil	Nil	2	3	3	2	7	5
C.P., East ..	3	2	2	Nil	2	2	2	1	5	3
Konkan ..	3	4	2	Nil	1	Nil	3	2	2	3
Bombay, (Deccan)	4	3	4	1	Nil	3	5	1	4	4
Hyderabad, North	4	6	8	3	2	2	4	Nil	4	2
Hyderabad, South	5	5	6	4	3	2	4	1	3	3
Mysore ..	4	3	3	2	3	6	4	3	3	1
Malabar ..	1	2	2	2	2	4	2	6	2	3
Madras, South-east	3	4	7	3	4	4	4	2	1	3
Madras, Deccan	3	3	6	4	6	4	5	1	2	2
Madras Coast, North ..	2	2	1	2	1	3	6	3	1	2

* Includes undivided Bengal up to 1946 and West Bengal from 1947-50 (data for 1947 not available).

Source: Supplied by the Meteorological Department, Government of India, 1955, Poona.

Rainfall and Agricultural Success

The data on rainfall and the facts on the agricultural goodness or otherwise of the seasons do not provide a positive indication for the dependency of agricultural success on the seasonal rains. A study on the subject for the Deccan region for the years 1865-1938 leaves the question, "How far is the actual amount of effective rain reflected in the success of the agricultural season in the areas under study" unanswered. The only conclusions which are possible are that it is difficult to correlate the success of a season not only with the total effective rainfall but also with the rainfall in any part of the season. The early rainfall is useless for the ascertainment of such correlation. What is likely to be the success of a year from the rains upto the end of July could no more be predicted than what will be the position after the later rains. The knowledge of the range of variations within a region may perhaps be of some use to cultivators but the correlation is hardly adequate to make administrative decisions regarding agricultural programmes. At best, it might help in checking the reports and provide a general guidance as to what might happen if the actuals deviate from the normal range of variations.

From the case study of Deccan, it appears that in all cases, beyond effective rainfall of 24" per annum, a further increase does not automatically increase the agricultural success of the season. The early rains, if at all, have some relative importance only to *kharif* crops. The rains in July can be of little or no guide. There is evidence that abnormal rains for July may also be injurious. It is on the rainfall after the end of August that the closest relationship between rainfall and agricultural success can be established. On the whole, however, it will be hazardous to correlate the success of an agricultural season with the total effective rain in any particular part of the year. The inference is that instead of taking the rainfall itself as the means of judging the effect of rainfall on agriculture, if the period of the wetness of the soil above certain standards is taken as the basis, a closer correlation is possible.⁵

⁵ Rainfall and Famine—A Study of Rainfall in the Bombay-Deccan, 1865-1938, Harold H. Mann, 1955.

Rainfall and Famine

In India, failure of rainfall has been always associated with the recurrence of famines. Till the first decade of this century, the failure of agriculture resulted in a heavy toll of human lives. The following table gives the incidence of famines.

FAMINE AND MORTALITY IN INDIA

Period	No. of famines	Estimated mortality (in million)
1800-1825 ..	5	1
1825-1850 ..	2	0.4
1850-1875 ..	6	5
1875-1900 ..	18	26
1900-1925 ..	17	4.8*
1925-1950 ..	13	1.5†
Total : ..	61	38.7

Data do not include the high mortality rates reported in 1901 Census Report for the Central India States of Malwa Agency, Bhopal, Indore Agency, Bhopawar and Indore Residency.

† Relates to the Bengal Famine of 1943.

As a result of the development of transport facilities and the more effective organisation of relief measures during periods of famine, the loss of human lives has been greatly reduced. A famine is now characterised more by a scarcity situation which implies shortage of purchasing power among the population than scarcity of food stuffs available. However, even now such scarcity conditions create intense suffering in the affected areas owing to the low sustaining power of the bulk of the cultivators and particularly of the agricultural labour class. There are still areas of chronic famine conditions in the Bombay State, Rajasthan, Andhra and East Punjab, extending over 30 million acres.

SOILS

The four main types of soil found extensively over India are : (1) the alluvial soil, (2) the black soil ; (3) the red soil, including red loams and yellow earths, and (4) laterite and lateritic soils. Besides, there are mountain and hill soils, desert soils, saline and alkaline soils, peaty and other organic soils.

The Alluvial Soil is formed of a fine sediment carried down from the mountains by rivers and is very fertile (except for the deficiency of nitrates) as well as light and easily worked. These are the most important agriculturally and they cover an extensive tract. In the Indo-Gangetic Plains alone (the whole of which is comprised in this area) they cover at least 300,000 sq. miles, *i.e.*, 19 per cent of the sub-continent's area where some 42 per cent of the population live.⁶ If we add to this, the alluvial soil area in Madras, Andhra, Gujarat area of the Bombay State and Kerala, half or more of the total population is alluvial in habitation. With such a long spread and varied sources of formation, the qualities are far from uniform. The variations in fertility are due mainly to factors of water-table, and the presence and absence of calcareous concretions in the sub-soil.⁶ In general these soils are adequate in lime but the nitrogenous and organic content is low.⁷ "Potash is adequate and phosphoric acid, though not plentiful, is generally less deficient than in other soils." On the whole, they contain all the ingredients of fertility, are not too dense in consistency, are naturally drained and lend themselves on this score to extensive irrigation schemes. It is, therefore, difficult to attribute any special regional crop distribution directly to alluvial soils. They provide an excellent media on which crops suited to the climate and aided by irrigation, whether by wells or canals can grow effectively. Sugar-cane and rice are the main typical crops of these tracts.

The Black Soil is most typically developed in the Deccan but is not entirely confined to this area. The soils are of varying quality and are found especially in the south and the south-east Madras and in extreme south-east (Tirunelveli). The alluvium belt of

6 *Vide* O.H.K. Spate, India and Pakistan, p. 82.

7 It may be said of Indian soils in general that humus (organic matter) and nitrogen tend to be deficient, but that lime, potash and phosphoric acid are usually present in suitable quantities. (*Vide* Mr. J. A. Voelcker, Improvement of Indian Agriculture, 1893, Chapter V.)

Gujarat and parts of the Coromandal coast include considerable areas of similar soils. In the Deccan, the soil is very deep but, on higher ground, it is thinner and grades into reddish brown or red. Over most of this area, cotton and *jowar* are the main crops. The black cotton soil is especially suited to the growth of the long-rooted, indigenous cotton plant, though it does not suit the shallow-rooted American cotton.

The Red Soils comprise various categories some of which are brown-grey or black. There are areas with good loams which respond well to irrigation. The mineral deficiencies are the same as for the black soil. The whole of Madras, Mysore, south-east Bombay, east of Hyderabad and a tract running along the eastern part of Madhya Pradesh, Chota Nagpur and Orissa contain mostly varieties of red soil. The crops that are most suitable for this type of soil are groundnut (the later maturing and bolder seed types) and minor millets, the predominant one being *Ragi* (*Elusine Coracana*), a millet confined almost entirely to the south of the country.

The Laterite Soil which is found in Central India, Assam and along the Western and Eastern Ghats is formed by the decomposition of the 'laterite' rocks due to heavy tropical rainfall. From an agricultural point of view, the prevailing characteristics of laterite are extreme acidity with an almost complete lack of lime and organic material. Where the soil consists of heavy loams and clays and can easily retain moisture, rice can be grown. Generally tea thrives best in these tracts. The plantation districts of South India, Bengal and Assam are therefore to be found in this region.

Soil and land utilisation survey is most essential not only for improving the efficiency in land use but for increasing crop yields. The major handicap in determining a scientific pattern of land utilisation in India is the lack of such a survey. At present the information on the various types of soil is being collected by different organisations such as the irrigation departments of various States, by agricultural experiment stations, universities and other institutions. These employ different techniques of classification and survey. Further, such data are available for limited areas only

scattered in different parts of the country. Consequently, there is no comparability between the data available. The Irrigation Commission of 1901, the Royal Commission on Agriculture, 1928, the Russell Report, 1936, and the Report of the Planning Commission, 1952, have all successively emphasised the necessity for a systematic soil survey of India as an essential preliminary to the development of irrigation and improvement of agriculture.

FOREST RESOURCES

The total area under forests is estimated at 180 million acres in 1953-54 or 24.9 per cent of the land area of the country.⁸ The forests are unevenly distributed, the proportion of forest land varying from about 11 per cent in the North-west to about 44 per cent in the Central region. Most of the forest areas are situated in hilly and mountainous areas, the Himalayas and their foot hills and the hilly ranges of Peninsular India (the Western and Eastern Ghats, the Vindhya, Satpuras and associated ranges). The area under forests in the Peninsular hills and plateau regions extends over 55.7 million acres, or nearly 31 per cent of the total forest area of the country. The high hills are covered with pine, fir and bamboo forests while on lower ground grow trees like teak, sal and babul. The major forest products are timber, firewood, round wood, pulp wood, charcoal wood, etc., while the minor products comprise bamboos and canes, drugs, spices, fodder and grazing, gums and resins, lac, rubber and latex, incense and perfumes, fruits, animal products and other miscellaneous materials. Table 2 gives the data on production of the major and minor forest products and also the financial results of forest administration. The most advanced countries in the world have the highest *per capita* consumption of wood. India's *per capita* consumption of round wood is 1.4 c. ft. as compared with 58 c. ft. in the U.S.A. The consumption of pulp products is 1.6 lb. as against 78 lbs. in the U. K. The area under forests is less relatively to the consumer requirements of the villages and those of industry and trade. *Per capita* forest area is 1.8 and 3.5 hectares in the U.S.A. and U.S.S.R. respectively, while in India the figure is 0.2 hectare. The National Forest Policy Resolution of 1952 proposed that the area under forests should be

⁸ *Agricultural Situation in India*, Vol. XI, No. 11, February, 1957, p. 860.

TABLE II
QUALITY AND VALUE OF FOREST RESOURCES

	Unit	1949-50	1950-51	1951-52	1952-53	1953-54
<i>Production</i>						
Major Forest Produce	.. in '000 cubic feet	..	..	..	..	..
Minor Forest Produce	.. value in '000 Rs.	..	..	..	..	..
		5,34,528	5,57,588	5,18,784	4,48,324	4,37,240
		56,791	69,248	70,588	59,401	63,077
<i>Exports</i>						
Major Forest Produce	.. value in '000 Rs.	..	..	..	..	..
Minor Forest Produce	.. "	..	..	..	..	..
		14,615	19,103	24,795	33,267	29,876
		45,096	53,515	59,443	56,343	49,950
Total ..	.. "	..	..	..	..	..
		59,711	72,618	84,238	89,610	79,826
<i>Imports</i>						
Major Forest Produce	.. value in '000 Rs.	..	..	..	..	..
Minor Forest Produce	.. "	..	..	..	..	..
		1,41,424	1,39,579	2,25,605	1,60,111	1,53,386
		27,898	31,808	37,657	19,646	24,866
		1,69,322	1,71,387	2,63,262	1,79,757	1,78,252
REVENUE AND EXPENDITURE ON FORESTS						
Revenue ..	.. in '000 Rs.	..	..	..	..	..
Expenditure ..	.. in '000 Rs.	..	..	..	..	..
Surplus ..	.. in '000 Rs.	..	..	..	..	..
		2,01,775	2,36,225	2,55,358	2,30,584	2,35,787
		88,891	94,932	1,03,111	1,08,480	1,13,611
		1,12,884	1,41,293	1,52,247	1,22,104	1,22,176

Source : *Agricultural Situation in India*, Vol. XI., No. 11, February 1957, p. 864.

raised steadily to 33 per cent of the total area, the proportion to be aimed at being 60 per cent in hilly regions and 20 per cent in the plains. The scarcity of forest produce and their gradual inaccessibility to the rural population have been the cause of the widespread habit of using cow-dung as fuel.

Forests are not only a source of revenue to Government, but also contribute to the welfare of the people. They render the climate more equable, absorb excess water during heavy rains and thus lessen the severity, both of drought and flood. This emphasises the importance of preserving an adequate proportion of the land area under forests in the interests of agricultural development. It is generally agreed that there has been a reckless destruction of forests in India in the past, over many parts of the country due to heavy over-grazing. The depletion of forest resources has deprived the peasantry of the much needed wood for fuel and for building purposes, and exposed agriculture to greater risks of drought, flood and soil erosion. It may have also been a factor in the sterilisation of the soil which has been reported. The scope for extending the forest area under the present pressure of population on cultivated area appears to be limited. There is, therefore, need in every State for a well-managed forest conservation and afforestation policy and for the creation of village woodlands and pasture, under a co-ordinated Central Forest Policy.

The exploitation of forest resources appears to have had thus far two objectives, *viz.*, that of the fiscal value of forests as a source of revenue and that of the conservational value of forests on climatic and physical grounds. According to these objectives, they have been classified by Government as either reserved or protected forests. The more urgent problems of providing cheap fuel to the rural population and grazing facilities to their cattle as also the necessity of providing raw materials for various industries have not received sufficient consideration in official planning. The tropical and semi-tropical forests of India hold out great possibilities for starting subsidiary industries such as manufacture of charcoal, extraction of turpentine, lac culture, preparation of dyeing and tanning materials, baskets, rope and mat making and such other occupations which, if well organized, would confer material benefits on the rural population.

ENERGY RESOURCES

In the location and supply of basic energy resources, India is at much more advantage than many other countries which have attained a very high level of productivity. All the energy resources are of atomic origin but the most convenient and economic resources immediately available are petroleum, natural gas, coal and hydro-electric power. India has an oil supply of 60 million gallons per annum from Digboi in Assam which may just meet 7 percent of her requirements when fully used. She is yet to find natural gas but in fossilised fuel deposits and hydro resources, the potential is adequate for any long range projection of development. In coking coal, she has reserves of 2,780 million tons which compare with 2,254, 172 and 1,011 million tons respectively in the U.S.A., U.K. and China, in steam and moulding coal about 39,650 million tons and lignite 2,000 million tons. Actually, production in India is only about 36 million tons of coal. Besides, there are deposits of 15,000 tons of uranium in fields having 0.1 per cent of uranium content. Much larger quantities are available with a lower concentration. There are monazite deposits of 150,000 to 180,000 tons with 8 to 10 per cent of thorium. The hydro-electric potential in India is 35 to 40 million kW. compared to 105 million kW. in U.S.A. Actually, 731,000 kW. or only 2 per cent of the estimated potential has been developed. The fuel wood is estimated at 400 million c.ft. plus 33 percent of unauthorised cutting. The cattle dung used as fuel is about 224 million tons. India has enormous availability of solar energy. 1 kW. of solar energy falls on one square yard on the surface during sunlight hours and in most parts, the sky is clear for 8 months in the year. The technology for economic use of this power has of course not yet been developed. Therefore, if one is to look ahead, the application of atomic energy through the means of radio-active isotopes in agriculture opens a vista of practical possibilities in the nutrition of cultivated plants and for improving their economic qualities. The nuclear technique is already under application in U.S.A. and Russia in spheres of plant nutrition, breeding improved crop varieties, soil fertility, drainage and irrigation, animal husbandry, fisheries and forests. By the release of this energy through re-actors under construction and planned, India may have an immense scope for stepping up the rate of development in agriculture.

MINERAL WEALTH

Besides the basic energy resources, India has a great store of strategic minerals. Their exploration and conservation on an economic basis has a special significance for rapid industrial development. The territorial distribution of the mineral resources is capricious, some parts of the country being poor, others being comparatively rich. Though the principal regions have been ascertained and progress has been made in the survey of mineralised areas, the qualitative and quantitative assessments of the country's reserves of the important mineral resources are not yet complete.⁹ Only a clearly ascertained and prepared geological map of India can give the estimate of the hidden resources in the mineral wealth of the country.

Coal: Among the important minerals, coal is distributed mainly in the north-east, in the States of Bihar and West Bengal which contribute nearly 82 per cent of the total output. In 1932, Sir Cyril Fox estimated the reserves of workable coal at 20,000 million tons. Of this, good quality coal is estimated at about 5,000 million tons, the bulk of which—about 4,600 million tons—is in the coal fields of Bihar and West Bengal. In addition, the reserves of tertiary coal are estimated at 2,500 million tons.¹⁰ The reserves of coking coal are estimated at 2,000 million tons.¹¹ Generally, the coal reserves are found to be fairly adequate on the basis of the industrial requirements of the country. But the position in coking and semi-coking coal indicates the necessity for the strict enforcement of conservation measures.

Iron Ore: In iron ore India has a large potential. The reserves of good quality are estimated to be over 10,000 million tons, the bulk of which occurs in Bihar and Orissa.

Manganese Ore: India is one of the chief producers of this mineral and has fairly large deposits of the ore. The largest and richest mines are those in Madhya Pradesh which yield ores, ge-

⁹ The National Plan has provided for a systematic detailed investigation of the position by the Geological Survey of India, the Indian Bureau of Mines and the National Laboratories.

¹⁰ Of the total of about 100 coal fields in India, only a few have been investigated to a depth of 1,000 to 2,000 ft.

¹¹ Committee on the Conservation of Coal (1949).

nerally with a high content of manganese. It is assumed that in the whole of India, the reserves of high grade ore may be 15 to 20 million tons and that of lower grades about three times this quantity or probably more from 70 to 80 million tons containing less than 42 per cent manganese.

Chromite: India has only moderate supplies of this strategic mineral. The deposits are found chiefly in the Singhbhum district (including Seraikela) of Bihar, the Mysore and Hassan district of the Mysore State. A very rough indication is only available of the resources which are estimated at 602,000 tons.

Non-ferrous Metals: The reserves of non-ferrous metals are inadequate with poor resources in copper, lead and zinc. There is practically no deposit of tin.

Bauxite: Bauxite is the chief ore of aluminium. The deposits are fairly widely distributed in India, particularly in Bombay, Madhya Pradesh and Bihar and in a small way in Orissa, Madras and Kashmir. Sir Cyril Fox estimated the total reserves at 250 million tons of all grades. Of this, high grade reserves would probably amount to 35 million tons.

Magnesite: Magnesite is used in the manufacture of magnesium salts, metallic magnesium and refractory bricks. The chief producing areas are Salem, Hassan (Mysore State) and Mysore. The deposits in Salem and Almora (U.P.) are estimated at over 90 million and 20 million tons respectively.

Mica: Mica is another strategic mineral, and finds its chief use in the electrical industry, while in powder form it is also used as a "filler" in various other industries. India is one of the important sources of sheet mica, producing between 70 and 80 per cent of the block mica output of the whole world. The principal mica deposits are concentrated in three regions, viz., Bihar, Rajasthan (including Ajmer-Merwara) and Madras while in recent years its occurrence has been reported from other parts of India also. It is assumed that there are untapped reserves which will run for many decades at the current rate of production.

Gypsum: Gypsum is a mineral of great importance, next only to coal and iron ; used as a raw material in the production of cement, and manufacture of ammonium sulphate, an important fertiliser. The gypsum bearing regions are in Rajasthan and in South India. The reserves are estimated at 67·1 million tons.

Sulphur: Sulphur occurs in the form of native sulphur and also in combination in the form of pyrites (iron sulphide) and other metallic sulphides. While deposits of pyrites are widespread, deposits of native sulphur in large size are unknown in India. The former are found in Kashmir, Bihar, Bombay and Mysore States. No estimates are available of the reserves of sulphur.

WATER POWER RESOURCES

In water power resources India holds the third place, next only to Canada and the United States of America. The total annual flow in the rivers is estimated to be equivalent to 1,356 million acre-feet for the Indian Union. Of this, only 76 million acre-feet or 5·6 per cent are being utilised for purposes of irrigation. The rest flow as waste into the sea. In 1921 a minimum continuous water power potential of 3·5 million kW. was indicated by a Committee which investigated the position. This is considered as an under-estimate and the total hydro-power potential is placed now between 30 and 40 million kW.¹² of which only just over half a million kilowatts has so far been developed. The country is thus utilising only about 2 per cent of the total power available, whereas Germany (East and West) has developed 50 per cent, Switzerland 38 per cent, France 27 per cent, the United States 22 per cent, and the United Kingdom 20 per cent of the national water power resources. In the last 17 years since 1939, the total electricity generating capacity in India has nearly doubled from about one million kilowatts in 1939 to 2·7 million kilowatts in 1956. About 32 per cent of this capacity is in hydro-electric stations. Including the generating capacity of a number of industrial and railway installations which have their own power plants, the total electric generating capacity in the country was

¹² The total power potential includes about 4 million kW. from the west flowing rivers, about 7 million kW. from the east flowing rivers of the southern region, about 4 million kW. from the rivers of the central region and about 20 million kW. from the Himalayan rivers.

approximately 3.4 million kilowatts in 1956. In 1950, about 560,000 kW. of energy were generated by hydro-electric plants. In 1956, the principal power schemes brought into service under the first national plan, accounted for 542,000 kW. Regarding consumption capacity, out of 561,107 villages in the country only about 7,400 or one in a hundred are served with electricity. Moreover, the development is not evenly spread but confined mainly to the States of Mysore, Madras and Uttar Pradesh and is associated with the development of hydro-electric power. The average *per capita* consumption is only 25 kWh. (1955-56) per year as compared to 1,100 kWh. in the U.K., 2,207 kWh. in the U.S.A. and 3,905 kWh. in Canada. In a number of States in India the average *per capita* consumption is below one unit per year. Only five States have a *per capita* consumption above the average. Besides, the distribution of power is also unbalanced as between urban and rural areas. About 3 per cent of the total population of the country concentrated in 6 large towns receive the benefits of 56 per cent of the total public utility installations in electricity. Thus, though India promises to be one of the leading countries of the world in the development of hydro-electric power on account of her untapped resources and potential demand, no thorough survey of these resources has yet been made. A complete and authentic survey is indicated as an indispensable pre-requisite to effective planning in rapid development of electricity for agriculture as well as for large and small-scale industries.

HORTICULTURE

The climatic diversity makes it possible to grow almost all kinds of tropical and semi-tropical fruits in the country. In Kashmir, north-western regions and the Punjab fruits such as apples, peaches, cherries and apricots can be grown. The Madhya Pradesh and to some extent, Assam are well known for the growth of oranges. In the plains of the Uttar Pradesh, Bihar, West Bengal, Madras and Bombay, mangoes, pineapples and bananas can be successfully grown. Although exact statistics are not available, the area under horticultural crops covers only about 4 million acres, *i.e.*, about 3 million acres under fruit and 1 million acre under vegetables, which roughly accounts for a little over one per cent of the total cropped area. Though comparisons between pre-war and post-war periods may not be possible on the same basis of coverage

of acreage statistics, there is a visible trend of a gradual decline in the area under 'fruits and vegetables' cultivation from 1920-21. At the same time, the value of imports of fruits and vegetables has risen to Rs. 141 million in 1954-55 from Rs. 36.1 million in 1920-21. The internal production of fruits is estimated at about 6 million tons and that of vegetables at about 4 million tons. At this level of production, the *per capita* availability of fruits and vegetables is reckoned at about 1.5 and 1 oz. respectively. These are quite inadequate on the basis of minimum nutritional standards at 3 ozs. of fruit and 10 ozs. of vegetables *per capita*. Obviously the development of horticulture on a commercial basis has received little attention in India so far.

LIVESTOCK RESOURCES

India has the largest cattle population of any country in the world. The total world cattle population in 1953-54 was 813 million.¹³ In 1956, the total cattle population in India was 159 million.¹⁴ There were 6.3 million buffaloes in the same year. The country possesses more than a fifth of the world's cattle or as many as are in the whole of Australia, New Zealand, North America and Europe (excluding Russia) put together. The U.S.S.R. had a total cattle population of 63.2 million in 1953-54 (nearly just a little over a third of India's total). The U.S.A. had a total population of 94.8 million which was a little more than half of India's total. The United Kingdom had only 10.71 million animals (one-fifteenth of the Indian cattle population). Denmark had 3.1 million cattle population.¹⁵ While thus India holds a pre-eminent position in her cattle resources quantitatively, more than half of this cattle wealth is lost to the country owing to the inferior quality of the animals.¹⁶ Inadequacy of grazing facilities, the prevailing religious sentiment against the slaughter of decrepit cattle and absence of

¹³ Year Book of Food and Agricultural Statistics : Production, Vol. IX, Part 1, F.A.O., United Nations, 1955, p. 126.

¹⁴ Agricultural Statistics of Reorganised States, 1956, p. 83.

¹⁵ Year Book of Food and Agricultural Statistics : Production, Volume IX, Part I, F.A.O., United Nations, 1955, pp. 123-126.

¹⁶ The National Income Committee, in their final report (1954), have assumed 55.4% of the cattle population as non-service animals for calculating the income from animal husbandry. Final Report of the National Income Committee, page 51. The Cattle Utilisation Committee calculated on an overall estimate that about 11.5 million adult cattle (or 10 per cent of the cattle population) are unserviceable or unproductive.

selective breeding on a wide scale have been perpetuating the poor species and rendering an increased number of them uneconomic aids to agricultural production.¹⁷ The data from quinquennial censuses from 1920 roughly indicate that there has been only a slight variation in the growth, the maximum being 6 per cent. The density of cattle per 100 acres of sown area is as high as 68 in India, as against 25 in Egypt, 15 in China and 21 in Japan.

The number of cows was estimated at 49·8 million in 1951. The proportion of cows which yield no milk or are not milked at all is on a conservative basis estimated at 55 per cent. The ratio of dry and other cows which are not in milk to those in milk varies considerably between the different States. According to the 1951 census, while in Madras, Mysore, Orissa, Bihar and Kerala, there are more than two hundred dry cows for every hundred milch cows over 3 years of age, in Madhya Pradesh and Uttar Pradesh, the ratio is lower at 115 and it is as low as 75 in the Punjab. This generally indicates that in the rice belt area and in the South, a comparatively large number of unproductive cows are maintained. The normal ratio of dry animals to those in milk should be 1:1. The high proportion in the above regions only imposes a great strain on the country's fodder resources.

The average yield of milk per cow in India is 413 pounds per lactation (the lowest in any country in the world) as compared to 8,000 pounds in Netherlands, 7,000 pounds in Australia, 6,000 pounds in Sweden and a little more than 5,000 pounds in the U.S.A. The buffalo yields on an average 1,101 pounds.¹⁸ Out of the 199 million cattle in the Indian Union, 70 million or 36 per cent are milch animals, *i.e.*, females over 3 years. Buffaloes form only 30 per cent of the milch animals but account for 54 per cent of the milk yield compared with 42 per cent yielded by the cows.

17 Approximately 750 farm bred bulls of known pedigree are distributed annually by the Governments in different States for developing draft as well as milch cows. The existing number of approved bulls meets less than 0·5 per cent of the total requirements of the country—Report on the First Five-Year Plan (1952), pp. 274-275.

18 In the Military Dairy Farms in India striking results have been achieved in increasing the milk yield of cows by cross-breeding of Indian animals with imported European bulls. From the mean average yield of 3,247 pounds in pure Indian, the yield rose to 6,859 pounds in the half-bred. The average number of days in milk also increased from 273 days to 324 days as a result of this cross-breeding. Continuous introduction of foreign blood, however, eventually affected the constitution.

Regarding the consumption requirements of milk, the average *per capita* consumption of milk and milk products is 5.5 ounces per day against the standard of 10 ounces per day recommended by nutrition experts. However, the consumption of milk and milk products varies considerably in different parts of the country. It is as high as 16.89 ounces in the Punjab and 15.72 ounces in Rajasthan while in Orissa it is as low as 2.64 ounces. Except the States of Punjab and Rajasthan all the major States are deficient in milk consumption measured by the standard nutrition requirements. The gross annual milk production in 1951 was estimated at 18 million tons of which about 70 per cent is marketable, the balance being either fed to calves or retained for home consumption. About 38 per cent is used for consumption as fluid milk, about 42 per cent for ghee and the rest for *khoa*, butter, curd and other products. Cows provide a little less than half and buffaloes a little more than half the total supply of milk. The Report on the Marketing of Milk in the Indian Union gives an average daily production of milk per village at only 2.5 maunds. The effective demand for milk and milk products is found in urban markets only, even though 95 per cent of the milch cattle are in the rural areas where 82 per cent of the population reside. Nearly 30 to 40 per cent of the urban milk supply is derived from villages situated within 30 miles of the urban areas. As milk is an integral part of the vegetarian diet and as a large part of the population belongs to this group, the gap between production and requirements indicates the need for improving the quality of the milch cattle and increasing their production capacity. It is estimated that with the present strength of milch cattle, milk production can be increased by 75 per cent, by better breeding 30 per cent, by better feeding 15 per cent, by better management 15 per cent and by disease control 15 per cent.

The efficiency of the cattle as draught animals for cultivation and draft purposes is also unsatisfactory. The average area now cultivated by a pair of bullocks is 10.2 acres. With better breeding, feeding and other methods of improvement, the potential number of acres that can be cultivated is 17.28 acres. It is estimated that the maximum that can be achieved and may be taken as the stan-

dard is 20 acres.¹⁹ This would mean an increase of 60 per cent in work capacity. On the basis of the calculations made by Dr. Burns, it is estimated that in the Uttar Pradesh and Bihar there is a surplus of about 4 million bullocks. This does not imply that there is surplus bullock power in each and every State in India.

For improving the quality of cattle, better feeding as well as selective breeding are required. At present, the quantity of fodder available is estimated at 78 per cent of requirements while the available concentrates and feed are estimated to be adequate only for about 28 per cent of the cattle.²⁰ This would mean that two-thirds of the cattle only can be maintained in a fair condition on the existing fodder and feed resources.

The adverse climatic and economic conditions possibly explain the low productive capacity of the cattle in India which is not commensurate with their numerical strength. In spite of this unsatisfactory position, the livestock products contribute a significant share to the total production capacity of India's agricultural economy. Dr. Wright who investigated the position in 1937 and attempted a scientific estimation of the contribution of cattle towards the national income, gave the productive value of this industry annually at Rs. 1,010 crores. On an overall comparison of the position based on the recent estimates made by the National Income Committee (1954), there does not seem to have been an improvement in the supply of livestock products. Even allowing for the effects of partition on the animal husbandry industry, there is an obvious decline in livestock production.²¹ Still, the annual contribution of livestock to the gross national income has been estimated at Rs. 1,104.3 crores in 1950-51. The present estimate which excludes the value of the animal power for draft purposes in agriculture and transport

19 Dr. Burns estimates that though the efficiency of the bullocks can be raised to the level of 30.72 acres per pair, it will not be possible, in practice, to utilise the whole of this efficiency as the bullocks will have necessarily to remain idle for a period. *Technological Possibilities of Agricultural Development in India* (1944), W. Burns, p. 110.

20 Dr. Burns calculated that concentrates and roughages were sufficient for only 29.14 per cent and 78.53 per cent respectively of the cattle population. *Op. cit.*, p. 111.

21 The partition resulted in the cession to Pakistan of the area which possessed the best resources in livestock, with improved breeds of cattle and higher yields of milk. See S. Thirumalai, *Post-War Agricultural Problems and Policies in India* (1954), p. 49.

constitutes over one-fourth of the total income in agriculture which is estimated at Rs. 4,800 crores.

In 1937, Dr. Wright estimated the value of the output of agricultural produce in India approximately at Rs. 2,000 crores and the contribution of the cattle industry at 50 per cent of that income.²² From a comparison of the present position, it is noticed that while the contribution of agriculture to national income has almost doubled, the quota of production in animal husbandry has remained almost stationary. However, the potential value to the nation of developing the animal husbandry industry and the resulting contribution which it would make to the farmers' income is indicated by the scope for increasing productive capacity of cattle by the use of scientific methods made available by research in animal husbandry. The magnitude of the potentiality can be illustrated by the nature of some of the livestock products in demand. India is the largest exporter of hides and skins in the Commonwealth region, her products representing half of the total Commonwealth exports. India's annual output of this group of products is estimated at roughly Rs. 34.8 crores in 1950-51. It is significant to note that hides and skins represent only a minor by-product of the cattle industry; still the trade in the products has a great monetary value. Similarly, cattle labour is an important item in agricultural production. An inquiry into the value of cattle labour in some of the holdings in the Punjab showed that between 15 and 20 per cent of the costs of cultivation fell under this head. This estimate has also been confirmed by investigations of the Indian Council of Agricultural Research. The manurial value of cattle is also an important factor in maintaining soil fertility at a high level. This has yet to be properly estimated.

The cattle population in India is excessive and it is among the least efficient in the world. Fewer but fitter animals would be the proper objective of policy. This objective will be reached only when we eliminate "scrub" cattle and raise the quality of the rest by selective breeding and keep them well fed through the provision of adequate grazing facilities.

²² N. C. Wright, Report on the Development of the Cattle and Dairy Industries of India, 1937, p. 58.

OTHER LIVESTOCK

India has roughly 40 million sheep or nearly one-third of the sheep population of Australia or more than one and one-third that of the U.S.A. (30·6 million), slightly less than the total number in Argentina (43·88 million in 1937) and more than one and one-sixth of the sheep population in South Africa (34·8 million). Indian goats, about 57 million, constitute nearly a quarter of the number of these animals in the world.²³ It is estimated that on an average, about 55 million pounds of wool are produced every year. Of this, 31·6 million pounds worth nearly Rs. 43 crores are exported from India mainly to the U.K. and U.S.A. Rajasthan alone contributes nearly one-third to the total production of wool. The deficiency in wool production is indicated by the fact that about 190 million tons of fine wool are imported, mainly from Tibet. The average yield of wool from a sheep is estimated at 2 pounds which is very low when compared to the production capacities in other countries. An improvement in quantity and in quality is necessary.

POULTRY

The number of poultry in the country has been estimated at 97·4 million (1956).²⁴ When compared to the numerical strength of poultry in different countries, it appears that India ranks very high among the poultry producing countries of the world. But in poultry farming the main factor for improvement is the application of research to increase the quality of the poultry population. The ordinary village hen is generally under-sized and is estimated to lay about 50 under-sized eggs in a year as compared to 120 in Western countries. By a process of selective breeding, the Indian Veterinary Research Institute has produced a superior strain which would step up the yield by about hundred per cent.

FISHERIES

Fisheries in India constitute an important source of improving the quality of the diet of the Indian population. Even in the present under-developed state, they contribute nearly Rs. 50 crores (1954-55)

²³ Year Book of Food and Agricultural Statistics : Production, Volume VI, Part I, F. A. O., United Nations, 1952.

²⁴ The Indian Council of Agricultural Research had estimated the number of fowls alone at 173 millions in this country, more than three times as many as in Great Britain and as many as eight times in Denmark. Only the U. S. A. has a larger number of poultry than India.

to the national income at a conservative estimate.²⁵ The production in 1955-56 was estimated at about 1.1 million metric tons out of which about 70 per cent are sea and estuarine fish and 30 per cent fresh water fish. Madras, Kerala and West Bengal are the three States which account for the major part of the production. Regarding the trends in production, though it is indicated that fish production has increased by 10 per cent, on the whole there has been a progressive decline in the production of fresh water fish. However, the potentialities in fish production are great. The rivers of India and the tropical seas around are a valuable source for a variety of rich edible fish. The brackish water lakes and back-waters are also rich in fish. The brackish water area is computed at about 1.9 million acres and includes the Chilka Lake covering about 256,000 acres and yielding about 3,000 tons of fish annually. The seas abound in special species of mullet and pomfret, seer, hilsa, mackerel and whiting. While the inland waters teem with varieties of fresh water fish of which the *rohu*, the *catla* and the *mrigal* are well-known. Even the creeks and hill streams contain fair supplies of fish such as mullet, perch and trout. Fish is the easiest and cheapest source of proteins and valuable mineral substances and hence the exploitation of fishery resources should materially raise the standard of the people's diet which, at present, is highly deficient in necessary proteinous foodstuffs. While potentialities of the development of fisheries in India are vast, a 50 per cent increase in fish production over a period of about 10 years is observed to be within the bounds of practical accomplishment.²⁶ The industry remains in the hands of an illiterate, poor and unorganised section of the people with little practical assistance from the State. The number of boats in operation is estimated at only about 70,000. Production per unit of effort is low because the small country craft cannot operate beyond a few miles from the shore and much time is wasted in going to and from the fishing grounds. "As in Japan it appears that the general conditions of the industry are such that initiative must necessarily be taken by Government in the uplift and education of the fishing community and the introduction and testing of raw and improved apparatus and methods."

25 Estimates of National Income, 1948-49 to 1954-55, Central Statistical Organisation, Government of India, April, 1956, p. 3.

26 Report on the Second Five-Year Plan, 1956, p. 292.

CHAPTER II

POPULATION

The Census of 1951 estimated the population of India at 356 million. Including the adjusted census figures for Jammu and Kashmir, the total population of India was 361 million. Of the total world population of 2,456 million in 1952, no fewer than 1,298 million were in Asia. A large proportion of Asia's millions were distributed in four countries—India, China, Japan, Indonesia—which together accounted for about 990 million people or 40·6 per cent of the world population.¹ The total for the sub-continent approximates to the conventional estimate for China and almost equals the population of U.S.S.R. and U.S.A. put together. Every sixth person in the world is an Indian.

GROWTH AND DENSITY

The population has grown from 203 million in 1872 to 215 million in 1881 and 238·4 million in 1891.² The following table gives the growth of population for the Indian Union territory since 1891.

GROWTH OF POPULATION : INDIA†

Census Year	Population (in millions)*	Increase (+) Decrease (—) during preceding Decade (in millions)	Percentage Increase (+) Decrease (—) during preceding Decade
1891	238·4	....	....
1901	238·4	....	....
1911	252·1	(+) 13·7	(+) 5·75
1921	251·3	(—) 0·8	(—) 0·32
1931	279·0	(+) 27·7	(+) 11·02
1941	316·7	(+) 37·7	(+) 13·51
1951	361·2	(+) 44·5	(+) 14·05

† Census of India, 1951, Vol. I., Part IA—Report, p. 181.

* Adjusted figures after Partition (including Jammu and Kashmir).

1 The world total must be regarded as only an approximate estimate, the data for Africa and Asia being subject to considerable error.

Vide Population and Vital Statistics Report, Series A., Vol. V, No. 4, October 1953, United Nations.

2 Till 1891, the figures pertain to the territories which constituted undivided India. For purposes of comparison the population figures have been adjusted to the partitioned territory of Indian Union from the Census of 1891.

The total increase since 1891 to 1951 is 122·8 million or 51·5 per cent in sixty years.³ The population remained stationary in 1891-1900, increased by 5·75 per cent in 1901-1910, and again declined by 0·32 per cent in 1911-1920. In the following three decades the population showed a rise by 11·02 per cent in 1921-1930, 13·5 per cent in 1931-1940 and 14·05 per cent in 1941-1950.⁴ On the basis of the average rates of increase of the two thirty year periods, the population increased between 1891-1920 at the rate of 1·8 per cent per decade while between 1921-1950 increased at the rate of 12·8 per cent per decade.

The increments in population in the second quarter of this century have been regarded as startling, when compared to the previous record. This aspect requires a more careful analysis on the basis of the trend of factors affecting birth and death rates than a mere inference on the basis of the increase in the total size of the population. When compared to the rate of population growth either in England or in Europe in this century the position in India is not intrinsically alarming. The increase in England and Wales over the 60 years before 1941 was 44 per cent in spite of the fall in the birth rate recorded during the period. "If our population increased during the census period (1921-31) by the size of a whole nation in Europe, is it so very strange when it is remembered that India is comparable not with a European country, many specimens of which are smaller in extent and population than some of our administrative districts, but with Europe as a whole."⁵ The rate of increase is almost comparable to that of Western Europe for the last one hundred years or so. The alarming aspect is not so much in the great absolute increase of about 2·5 millions a year in the size of the population in this half century but the fact that the population increase has not been accompanied by an increase in the rate of industrialisation com-

3 It is not possible to estimate the increase in population due to the inclusion of the new areas and improvement in the method of enumeration in the census. It is, however, reported that in the 1941 census about 59 million of the increase was due to these factors. In following the trends of population increase according to census data the limitations of the census enumeration in the different periods must be clearly recognised. In 1941, the census was incomplete for reasons of economy and war conditions. The methods of enumeration and tabulation differ from census to census so that comparison is often misleading.

4 The mean decennial growth rate in the last decade takes into account the population of Jammu and Kashmir also.

5 D. G. Karve, *Poverty and Population in India*, 1936, p. 33.

parable to that of Europe or that of the United Kingdom. The resulting increase in pressure on the land in a dominantly agrarian country has highlighted the dangers of excessive population growth. This point is also supported by the remarkable irregularity in the curve of population increase. It is only the last two decades that have added tens or even scores of millions, while in the earlier decades the net gain viewed proportionately to the size of the population was almost negligible. Therefore, it is not safe to assume that this rhythm has been broken since 1921, absolutely, because in spite of the fall in death rate, the general physical factors which contribute to recurring periods of epidemics or drought which carry a large toll of human lives still persist to operate.⁶ In view of the prevalence of periodic drought conditions familiar to localised areas in Southern India, Orissa, Bombay-Deccan, etc., a mere general extension of the 1921-51 curve would be misleading. The reason is not far to seek. Arthur Geddes has graphically described the situation as that "vast masses, perhaps the majority of the Indian peoples live on such a low level of nutrition and so exposed to disease that their continued existence is 'marginal'." While it may be broadly true that social customs encourage a higher reproductive rate, there is a "close direct correspondence between harvest and birth rates and inverse correspondence between harvest and mortality."⁷ This generalisation is fully corroborated by the details contained in the regional studies and the actual variations of rate are greater than appears from the bare census statistics owing to the non-coincidence of famines and epidemics with census years.

6 Even in the last census period the mortality rate in Bengal due to famine in 1943 was most marked among the young and many reproductive females and has had a visible demographic effect. Bengal through the period of 1901-41, showed a rate of increase markedly higher than that of all India, 43.1 per cent against 37 per cent and in 1931-41, 20.3 per cent against 15 per cent. But in 1941-51, East and West Bengal together increased only by 10.9 per cent against 12.3 per cent for the whole of India.

7 The social (in fact the religious) customs are not very susceptible of geographical analysis, their distribution being very general and bound up with complex caste structures. Such spatial variations as they show are for the most part only very obscurely or indirectly related to geographical factors. While the premium placed on marriage by practically all the religions of the sub-continent may be a factor encouraging birth rate, the prohibition of widow re-marriage obviously operates to limit births, however less important this may grow, on progressive social reforms. At all events, the apparent accentuation of an already well marked sex disparity is obviously a factor of vital importance for the future rate of increase, which may slacken from this cause alone. Besides, early consummation which is common is associated with lower fecundity and there is the notorious and terrible loss of life in child birth and in infancy. And added to this are the losses due to abnormal visitations of nature.

See O. H. K. Spate, *Op. cit.*, pp. 100-101.

In the analysis of the facts on population growth, the net reproductive rate is an important factor, determining the future trends. The formulation of a population policy should obviously depend on a precise knowledge of the NRR. The NRR. is affected mainly by the incidence of mortality on females and on different age groups among the females. In the past, the increase of the Indian population has been followed by an increasing mortality rate among women. The expectation of life in India is also incredibly low. In 1921-30, the expectation of life at birth was 26 years and 11 months and at the age of 10 it was 36 years and 5 months. This is only half the figure of Italy, similarly situated in respect of demographic pressure. Even at the best period (4 to 5 years) the expectation of life was only 37 for females and 39 for males. There has been no appreciable increase in this rate between 1891-1931. By 1931-41, however, the expectation at birth rose to 32.1 years for males and 31.4 for females. In the decade 1941-50, the increase has not been quite significant. The expectation of life at birth in 1951 was 32 years and 5 months and at the age of 10, 39 years. In the last 20 years, there has been a general increase in the expectation of life at birth by 5 years and 6 months and at the age of 10 by 2 years and 7 months. Though the increase has not been progressively maintained in the last decade there is no doubt that there has been an improvement, *i.e.*, a decline in mortality rates. This indicates the modest achievement of the country in improving public health. However, when compared to the position in other countries the situation does not admit of a complacent attitude. The expectation of life at age 10 is 59 to 60 years in England and Wales, Australia and New Zealand. It is 56 in the United States of America, about 50 in Japan and 47 in Egypt. India seems to hold the record in having about the lowest expectation of life among any modern nation of the world.⁸ The mortality of children under age 5 is heavy. During the last decade, it was one hundred and fifty-two for one thousand births. When allowance for omissions in registration is made, the true rates may probably be higher than the recorded figures. The entire excess of births is matched by an equal excess of infant deaths. The risks of early deaths are disproportionately higher for women due to the strain of early and repeated child birth on the im-

8 Kingsley Davis, *The Population of India and Pakistan, 1951*, p. 62

pact of various social forces, the hopelessly inadequate nutrition and care before and after parturition and also the insanitary surroundings and unhygienic environment in which the masses of the people live. The point to be emphasised is that the comparatively high female mortality can hardly fail to have an adverse effect on the NRR. The facts point to a perplexing situation. From a demographic point of view, the prevention by social reforms and public health measures of this acute physical suffering caused by infantile mortality would naturally result in the saving of new lives. This would mean a strengthening of the younger contingent, a more progressive age structure and consequently the prospect of increasing the rate of increase. The more pressing problem, on the other hand, is to regulate the increase of population. The decline in infantile mortality would ultimately prove, therefore, to have magnified the problem of an excess of population over population capacity in relation to food resources.

Density : The density of population varies from one area to another due to numerous factors the impact of each of which cannot be clearly indicated. The most important are the conditions of rainfall, availability of irrigational facilities, the configuration of land and development of resources.⁹ The census of 1951 has attempted a scientific classification of natural zones into five broad regions purely from the point of view of topography. On the total area of 1,269,640 sq. miles, there was in 1951 an average density of population of 285, about six times the world average. But actually the densities vary from under 6 in areas of Kashmir and 1015 in Travancore-Cochin (9,144 sq. miles). In Cochin, there are rural areas with as high a density of population as 2,000 to 4,000. Such dense rural concentrations are noticed only in China and Java. The high density sub-regions are the Lower Gangetic Plains, the Upper Gangetic Plains, Malabar-Konkan, South Madras and North Madras and Orissa Coastal areas. The density varies from 461 in North Madras and Orissa to 832 in Lower Gangetic Plains giving a total average density of

⁹ In the previous edition the country was divided into four natural regions of more or less uniform agricultural conditions and the influence of the development of natural resources on the growth of population was indicated according to that division. This division is no longer valid on account of the political changes and has, therefore, not been followed.

660 for the whole region. Thus, approximately one-half of the population of India is concentrated on less than one-quarter of the area. This may possibly be explained by the favourable topographical components of this region in point of the incidence of rainfall and a favourable distribution of land among the different rainfall belts. The medium density sub-regions are the Trans-Gangetic Plains, South Deccan, North Deccan and Gujarat-Kathiawar. The average density is 260 with a variation from 226 to 332. The low density sub-regions comprise the Desert area, Western Himalayas, Eastern Himalayas, North-West Hills, North Central Hills and Plateau and North-east Plateau. The average density in this region is 129 with a variation from a maximum of 192 to the minimum of 61. On the whole, the six sub-regions cover a little less than half of the area and the population number only within one-fifth and one-fourth of the total population.

It is possible to account for the increase in population in the respective natural regions only on a very rough basis of the economic changes that have occurred in the last 60 years. The population increases in the higher density regions have been facilitated by the construction of extensive canal irrigation systems, growth of plantations in the Brahmaputra Valley, Cochin and Travancore, mining and industrial development in some of the regions and reclamation of wastelands. The growth in all the sub-regions of this region is more than 13.7 per cent. In the medium density regions also, the above causes have been responsible partly for the increase in the population noticed. As some of the sub-regions in this group were comparatively older among the settled regions, the scope for fresh development of the land might have been less and possibly the increase in the population was correspondingly smaller. One significant feature is that all the high density regions have been old centres of civilisation and have been populated densely from historical times. In the context of the industrial progress which has been comparatively significant in the last three decades and the development of irrigation works, the rate of increase of population has been proportionately less. Migration of population, vagaries of the monsoon, recurring famines and epidemics have been other contributing factors affecting the density of population in the different regions.

Distribution : No less significant than the growth of population and the rate of growth is the highly uneven distribution of the population. Table 1 gives the distribution of population in India according to natural regions and density per square mile. The classification shows that nearly two-thirds of the population of the country is concentrated in two-fifths of the area. The comparative position in 1931 and in 1951 is also indicated in the above table. The distribution figures also show that while at one extreme, 25 per cent of the area supports only 7 per cent of the population with a density of below 150 per square mile, at the other end 37 per cent of the people are concentrated in 14 per cent of the area with a density of over 600. The average density in India is 285 persons per sq. mile. On this basis, approximately 58 per cent of the population by concentrating itself on 28 per cent of the area has exceeded this limit—about 37 per cent of the people having crossed the limit of more than two-fold.

The distribution of population is perhaps best summarised as peripheral to the Deccan and to the great arid belt from Baluchistan (in Pakistan) to Rajputana. The areas with district densities equal to or greater than the All India average of 285 extend right along the coast from Gujarat to Chittagong with breaks only in the hilly forested country where the Western Ghats approach the sea in North Kanara and in Nellore where the Peninsular area with under 40" rainfall reaches the coast. The general control is obvious. The areas of alluvial low lands with either good rainfall or irrigation possess a higher density while at the other extreme, areas with densities under 40 are all either arid or mountainous or both. This distribution clearly discloses great pressure on the land, irrespective of the absolute densities.

Urbanisation : In spite of nearly three decades of attempts at large-scale industrialisation, urbanisation has made little progress. The proportion of rural population to total population is still as high as 82·7 per cent in India as against 47·1 per cent in France, 46·9 per cent in Northern Ireland, 36·3 per cent in U. S. A., 35·8 per cent in Canada and 19·3 per cent in the U. K. Table 2 gives the trend in urbanisation since 1881. The population employed in organised industries is computed at about 2·4 millions or 1·8 per cent of the working population compared

TABLE 1

DISTRIBUTION OF POPULATION IN INDIA

(Area in '000 sq. miles and population in thousands)

Density	Under 150		150-300		300-450		450-600		600 and over		
Year	Area	Population	Area	Population	Area	Population	Area	Population	Area	Population	
1951	..	317	26,031	595	1,24,700	78	25,900	101	51,800	179	1,32,700
	25.0%	7.0%	47.0%	35.0%	6.0%	7.0%	8.0%	14.0%	14.0%	37.0%	
1931*	..	57.17%	17.5%	22.1%	23.4%	8.3%	15.3%	5.5%	14.3%	6.4%	29.5%

Dr. Gyan Chand, India's Teeming Millions, 1939, pp. 90-91 ; figures relate to undivided India.

Source : Compiled from the Census of India, 1951, Vol. I, Part I-A—Report.

with 2·16 million in 1941 and 1·7 million in 1938.¹⁰ The increase is well under 50 per cent when compared to the pre-war. The Planning Commission estimate that the shift of occupation from agricultural to non-agricultural sector since 1911 has been only 3 per cent.¹¹ There is no reliable estimate of the population employed in large numbers in unorganised industries, in urban areas, in village industries, small businesses and trades or various works employing unskilled labour. While, therefore, no precise estimate is available of the extent of employment, actual and potential, in the non-agricultural sectors it would appear very doubtful if the present rate of industrialisation can absorb the existing surplus population in agriculture and the whole of the probable annual increase. Emigration is not likely to be a factor in relieving the pressure of population on agriculture.¹²

TABLE II
TREND IN URBANISATION

(Population in millions)

	1881	1921	1931	1941	1951
Total Population	250·2	305·5	338·2	388·8	361·2*
Urban	23·0	31·3	37·5	49·6	62·6
Percentage to total	9·2%	10·2%	11·8%	12·7%	17·3%
Rural	227·2	274·2	300·7	339·2	298·6
Percentage to total	90·8%	89·8%	88·2%	87·3%	82·7%

* Figure refers to the Indian Union.

Source : Compiled from the Census of India—Reports.

10 Quoted in Programmes of Industrial Development 1951-56, Planning Commission, p. 2. The Fiscal Commission in 1949-50 estimated the employment in large-scale industrial undertakings at 3 millions which seems to be rather high. Possibly these must have been due to the wartime spurt in employment.

11 The First Five-Year Plan, p. 651.

12 Estimates with varying degrees of reliability have been made of the surplus population in agriculture. It was estimated at only 15½ millions by Tarlok Singh in his 'Poverty and Social Change'. The whole subject needs detailed investigation and analysis. The only position that seems to be clear is that the annual increase of population alone is equal to the present working capacity in large scale industry.

OCCUPATIONAL DISTRIBUTION

The occupational distribution of the population according to the census of 1951 is given in Table 3. If allowance is made for statistical limitations we can hardly refrain from drawing the inference that there has been a relentless pressure exercised on land by this prolific increase in population, the number of persons occupied under agriculture having increased from 91 million in 1901 to 105 million in 1921.¹³ The 1931 census, however, placed the figure lower at 103 million. This was not a real decline but a change which was the result of an alteration in the method of

¹³ It would be highly unscientific to draw conclusions relating to the changes in the occupational distribution of the rural population during the census periods on the basis of the census data. As there is lack of uniformity on the very basis of classification adopted at the various censuses, the available figures for the census periods and the classification adopted are given in the following table only to give a rough knowledge of the position at different periods than as a basis for any comparison of the trends in occupational distribution.

OCCUPATIONAL COMPOSITION IN INDIA : 1901-1951

(Population in millions)

Occupational Classification	Population supported		Working Population			Population supported 1951†
	1901	1911	1921	1931	1941*	
Total Agricultural Population (a) of which ..	204.1	225.3	106.3	110.7	127.5	249.0
Rent Receivers (b)		7.7	3.7	4.2	4.8	5.3
Owner Cultivators	152.7	167.0	74.7	28.4	32.7	167.3
Tenant Cultivators (b)				36.2	41.7	31.6
Agricultural Labourers ..	33.5	41.2	21.7	33.5	38.6(c)	44.8
Percentage of agricultural labourers to the total agricultural population ..	16.4	18.3	20.4	30.2	30.2	18.0

Source : Reports on the Census of India (1901) Vol. I, Part II, p. 368; (1911) Vol. I, Part II, p. 262; (1921) Vol. I, Part II, p. 22; (1931) Vol. I, Part II, p. 206; and (1951) Vol. I, Part I-A Report, p. 108.

* 1941 Figures are estimated on the basis of a 15.2 per cent increase in the total population between 1931 and 1941.

† Excludes Jammu and Kashmir.

(a) From 1901 to 1941 the coverage extends to the entire territory of India, including Burma.

(b) Wherever separate data are not shown for rent receivers and tenant cultivators, their figures are included in the numbers of owner cultivators.

(c) According to the calculations of the Ministry of Agriculture for the areas covered by the Indian Union, the number of agricultural labourers was 28.1 million in 1931 and 33.9 million in 1948; See Ministry of Agriculture, Government of India, *Agricultural Situation in India*, July 1948, pp. 35-36.

TABLE III
OCCUPATIONAL DISTRIBUTION : 1951

POPULATION AND RURAL FAMILIES											
Census Zones	Rural Population			Rural Families (Percentages)		Agricultural Labour		Non-Agriculturalists	Estimated Number of Families (thousands)		
	Popula- tion (millions)	Actual	Percent of (3)	Land Owners	Tenants	With Land	Without Land		Agricultural Labour		
								Rural	With Land	Without Land	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
India	361.2*	298.6*	82.7	22.2	27.2	15.2	15.2	20.2	57,976	8,838 8,821
North India	63.2	54.6	86.3	7.7	56.1	5.7	8.6	21.9	11,056	634 929
East India	90.1	80.1	90.0	16.3	29.9	19.0	13.7	21.1	15,418	2,911 2,109
South India	75.6	60.7	80.0	23.0	6.1	27.3	22.8	20.8	12,283	3,361 2,816
West India	40.7	28.0	65.0	44.8	18.4	8.8	11.6	16.4	5,179	477 627
Central India	52.3	44.1	80.0	25.0	22.0	14.6	22.1	16.3	8,987	1,310 1,975
North-West India	39.3*	31.1*	80.0	42.2	25.1	2.7	7.1	23.0	5,053	145 365

Including Jammu and Kashmir.

Source : Columns (2) to (4)—Census of India, Paper No. 1, 1952, and Agricultural Labour in India, How They Work and Live, Government of India, 1954, p. 52.

classification. As the Census Commissioner puts it : "It should be made clear at the outset that the decrease in Clause A (Production of Raw Materials) caused undoubtedly by the decrease in sub-clause 1 (Exploitation of Animals and Vegetation) is rather apparent than real. The change is due to the number of females who have written their occupations as domestic services. In 1921, these would have appeared as workers—mainly, if not entirely agricultural—in the occupation in which they assist the male members of their families."¹⁴ It is because of this transference of the bulk of agricultural female labourers that the miscellaneous group shows an increase of nearly 97 per cent within a decade. If this fact is taken into account, the dependence of the population on agriculture would show a steady increase from 61·1 per cent in 1891 to 71 per cent in 1911 and 73 per cent in 1931. There was no occupational classification in the census of 1941. But basing the calculations on the classification adopted in the 1931 census, the position would be that roughly 73 per cent were occupied in agricultural occupations. In 1951, the position remains almost the same at 69·8 per cent.

PRESSURE ON LAND

The Famine Commission of 1880 remarked that "at the root of much of the poverty of the people of India and of the risks to which they are exposed lies the unfortunate circumstance that agriculture forms almost the sole occupation of the masses of the population." Many economic forces have contributed to this steady increase in population. The most important of them were the decay of traditional indigenous industries, lack of alternative avenues of work and the rise in land values in the wake of security in land provided by agrarian legislation and the record of rights. The available statistics show that particularly in the first three decades of the century, most of the rural workers from occupational castes have been compelled to abandon their traditional occupation and have taken to cultivation. It was found that in 1931, only 27 per cent of workers were engaged in their traditional non-agricultural occupation and that about 64 per cent of those who had given it up took to agriculture and allied pursuits. It is difficult to estimate the process of disintegration of

¹⁴ *Vide* Table No. XI, "Occupation of Selected Castes", pp. 414-419, Census of India, 1921, Volume I, Part II.

caste occupations since 1931, but the steady and significant increase in the class of agricultural labourers indicates that the process must have been completed in the latter two decades. Possibly in the agricultural strata at present only a very small percentage of population is still pursuing the traditional occupations enjoined by the caste.

AGRICULTURAL LABOUR

There was no distinct class as agricultural labour, before the 19th century as the traditional agrarian society was founded on an integrated unity of agriculture and handicrafts. The exchange operations of the agricultural producers and the consumers in the rural areas who constituted all the non-agricultural class occupied in industrial pursuits were regulated by certain conventions.¹⁵ Sir George Campbell referred to the fact that "as a rule, farming is not carried on by hired labour".¹⁶ Romesh Chandra Dutt observed that "in 1842 Sir Thomas Munroe as Census Commissioner reported that there were no landless peasants in India (an undoubtedly incorrect picture but indicating that the numbers were not considered to require statistical measurement)".¹⁷ The absence of a large class of agricultural labourers upto the end of 19th century is also revealed by certain regional studies of India. The Punjab Census of 1868 noticed that agricultural labourers and all herdsmen numbered only 231,500 or less than 3 per cent of a total agricultural population of about 9,256,000.¹⁸ The study of Faridpur district of East Bengal undertaken by J. C. Jack in the first decade of the 20th century also confirmed the same fact. He observed that "it is probable that among all those cultivators there were none who were exclusively agricultural labourers, that is to say, labourers in the English sense of the term. The landless labourer so common in England is unknown in Faridpur and very rare anywhere in Eastern Punjab."¹⁹ Similarly "the existence of a large landless

¹⁵ Unfortunately, there is no precise information on the extent of agricultural labour hired for the purposes of farming. In the present economy, the class of agricultural labourers derived its main livelihood from wages, either in kind or cash working on the lands of others. From a study of the economic conditions in pre-British India, it can be safely concluded that agricultural labourers did not constitute an element of the agrarian society.

¹⁶ Sir George Campbell, *Modern India*, 1852, p. 65.

¹⁷ R. C. Dutt, *India Today*, 1947, p. 198.

¹⁸ Census of Punjab, 1868, Table No. 4.

¹⁹ J. C. Jack, *The Economic Life of the Bengal Districts*, 1916, p. 84.

proletariat with no security of tenure as tenants or as farm labourers on others' land was not a big problem in the past in South India."²⁰ The report of the Census for Madras showed that in 1871, 13 per cent of the male population was enumerated as labourers and probably more than three-fourth of these found employment in connection with land.²¹ There is no reference in any of the authoritative writings on Indian village communities up to the middle of 19th century to agricultural labour as constituting the sole occupation for any sizeable group of the population.²² From these early accounts, it is clear that the problem of agricultural labour was a phenomenon of the period of the British rule in India.

With an increase of population, the growing pressure on the available cultivable land resources combined with the growing indebtedness of the agricultural classes due to the facility of transfers in land provided by the agrarian reforms, the emergence of a class of landless labourers was clearly noticed. There was a speedy growth in this "floating" population from 18·7 million in 1891 to 33 million in 1931. Between 1911 and 1931, the number of labourers per one thousand cultivators rose from 247 to 519 in the country.²³ In any case, the change in ratio is somewhat remarkable, even when adopting the lowest ratio which can be compared with that of 1911. Possibly the explanation is that a large increase has taken place in the agricultural population without a corresponding increase in actual holders of land whether as tenants or owners though it is likely that a concentration of land in the hands of non-cultivating owners was also taking place.²⁴ The proportion was even higher as it varied with the size of the displaced population from the traditional occupations. Between 1941 and 1951, the proportion varied from 519 to 225.

The agricultural labourers are classified broadly into two categories, the contract (attached workers) labourers and the casual

20 P. J. Thomas and K. C. Ramakrishnan, *Some South Indian Villages—A Re-survey*, 1940, p. 347.

21 Census of Madras, 1871, p. 117.

22 *Vide* Radhakumud Mukerji, *Local Government in Ancient India*, also the *History of Village Communities in Western India*, Bombay University Economic Series No. 4, and Dr. Mathai, *Village Communities in India*.

23 The Census reports for 1911 and 1931 give the proportion as 254 and 407 respectively. The disparity might be due to an error in calculation.

24 Census of India, 1931, Vol. I, Part 1—Report, p. 288.

labourers.²⁵ In the present agrarian hierarchy, agricultural labour forms an important sector which has been gradually increasing in number. On account of the seriousness of the problem arising out of a striking increase in the agricultural labour population, the economic conditions of this sector of the population has come in for a specific enquiry by Government. The Agricultural Labour Enquiry (1950-51) enumerated nearly 17·6 million families out of a total number of 58 million rural families as agricultural labour.²⁶ According to the 1951 census, the agricultural labour families constituted 14·9 million or 21 per cent of the total agricultural population. Under the Agricultural Labour Enquiry out of the total agricultural labour families, 50 per cent were landless. Of this total labour force in agriculture, 90 per cent of the families were casual labourers and 10 per cent attached labourers.

In the distribution of agricultural labour, there is a wide variation in the different parts of the country. The proportion is the highest in South India being 50 per cent and lowest in North-West India being 10 per cent of the number of rural families. The proportion is again quite low in the North being 14 per cent and relatively high in Eastern and Central Zones, 33 per cent and 37 per cent respectively. Of the total number of 17·6 million labour families, the largest number, 6·2 million was located in the Sou-

²⁵ In the original edition, the labourers were classified into three groups: field labourers, ordinary labourers and skilled labourers. The field labourers comprise the ploughmen, sweepers, sowers, weeders and transplanters. The ordinary labourers are engaged on such works as constructing embankments, well-digging, silt clearing in canals, etc. The skilled labourers include the carpenters, masons, blacksmiths and leather workers and other artisans who, though not exclusively agricultural workers, are engaged for important purposes by the farmer and the wages paid to them are governed by those paid to the agricultural labourers in the village. This classification may well generally hold good in respect of the functions of the agricultural labour class. But the broad classification based on the tenure of work is much more valid in the present study as it has been followed in recent classifications. The Indian Rural Problem, 4th Edition, pp. 32-33.

²⁶ According to the Agricultural Labour Enquiry, the definition of agricultural labour was widened to include the marginal cultivating families with small strips of land. For these families, labour was the major activity and income from labour formed as much as 64 per cent of the total income while that from land accounted for only 14 per cent.

The Census figures distinguished agricultural labour as the 'cultivating labourer', i.e., as an employee of a cultivator whose business merely is to perform physical labour in the manner required by the cultivator. It is not clear whether the census figures also include those labourers who have small bits of land but derive their main income from labour. From the discrepancy noticed in the enumeration of the agricultural labour by the Enquiry and the Census, it may be inferred that under the Census figures possibly the cultivating labourers did not include those persons who own land.

thern Zone of which 5·1 million were in the State of Madras. East India ranks next in containing 5 million families of whom 50 per cent were concentrated in Bihar. In the Central Zone there were nearly 3 million families and the North and West India, 1 and 2 million respectively. These figures are indicative of not only the magnitude of the problem in the different zones but also the factors which have intensified this problem.

The size of the agricultural labour families was larger when compared to the urban families. The average size of the agricultural families was 5·2 persons as against 4·8 persons for the urban family. Among the agricultural families, the size of the agricultural labour family was much smaller 4·7 as compared to the size of the owner families 5·45 and tenant families 5·39. Among the agricultural labour families, the landless were even smaller in size 4·1. On an average, the total working strength from an agricultural labour family was about 2·6. Almost all the men and a little over half of the women and the children above the age of 10 contributed to the working force. The special features of the agricultural labour families, *viz.*, the smaller size, the larger number of earners and greater participation of women in work were common in all the States of India. An analysis of the occupation of the members of the agricultural labour family discloses that there is less dependence among the members on agricultural labour as an occupation and more dependence on non-agricultural pursuits. This trend of diversion from agricultural labour to other occupations among the agricultural labour families was also uniform in all the States. This may indicate that it is due to the absence of other avenues of employment that there is a higher incidence of dependence on agricultural labour in rural areas.

EMPLOYMENT AND WAGES

The measurement of the period of employment in agriculture and the periods in which the agriculturists remain unemployed or under-employed has not yet been attempted on a scientific basis taking into consideration the regional characteristics which determine the operations in agriculture. In one of the earlier surveys, in the village of Denana near Kadi, Baroda, the period of work for the agriculturists was only 134 days in a year. The agricultural labour class in the village was occupied only for 5 to 6

months in a year. In an enquiry conducted in Bombay, it was noticed that fluctuations in employment opportunities on 'own farm' and in 'agricultural labour' were parallel, *i.e.*, when there was lack of work on one's own farm, availability of work for agricultural labour also diminished. The gainful employment varied from 71 per cent to 90 per cent of the total available work days.²⁷ The regional enquiries which are not adequate for a correct appraisal of the position of employment in agricultural labour indicate that generally the labourer is not only unemployed over a considerable part of the year but that non-agricultural employment is also not open to them. This reflects the precarious nature of the employment for the agricultural workers and their earnings.

The determining factor of employment in agriculture is the seasonal character of the operations. While the peak seasons offer maximum employment, the rest of the agricultural year leaves the labourers in continuous search for other alternative avenues of employment. The preliminary enquiry into labour conditions conducted by the Government of India (1949) in 27 villages revealed that the casual workers with land suffered larger unemployment than those without land. The enquiry into agricultural wages has shown that agricultural men workers were employed on an average for 189 days on wages in agricultural labour and for 29 days in non-agricultural labour. The wage employment on the whole covered a period of a little over 7 months. For the remaining period either there was total unemployment or employment on land owned by them, if any, or on occupations other than wage earning. It is estimated that the total unemployment covered a period of about 100 days and self-employment for about 50 days. During the period of self-employment it is difficult to observe whether they were occupied for the full day. The factor of hidden under-employment is not susceptible to estimation.

The quantum of employment among men labourers varied between the two categories of labour, the permanent or attached

27 M. L. Dantwala—"Some Aspects of Rural Employment," *The Indian Journal of Agricultural Economics*, August, 1953, p. 24. The enquiry referred to in the article was conducted by the Bureau of Economics and Statistics, Government of Bombay during 1949-51.

and the casual who constituted 15 and 85 per cent respectively of the total labour force. The casual labourers were employed for about 200 days, 167 days in agriculture and 33 days in non-agricultural labour. The attached labourers were employed for 315 days in agricultural labour and for 11 days in non-agricultural pursuits. The regional variations in employment opportunities for agricultural labour are accounted for by the differences in the size of holdings, fertility of soil, weather and crop conditions, irrigation facilities, nature of the crops grown on the one side and, on the other side, the total labour force and that of the proportion who sought wage paid employment.

It is significant to note that opportunities for non-agricultural employment were limited. Such employment was available for 29 days in a year on an average, varying from 20 days in West India to 42 days in East India. The duration of such employment was also extremely uncertain. Regarding women workers the scope for employment was much restricted due to social customs which prevented them from taking to regular wage paid work. They were found suitable for employment only in certain agricultural operations like weeding, transplanting and harvesting. On an average, the period of employment for women worked out to 120 days in agricultural labour and 14 days in non-agricultural labour. Analysing the share of men and women in agricultural labour it has been found that women who formed 44 per cent of the total labour force in India accounted for 35 per cent of the total man-days work while the corresponding percentages for men were 52 and 62 respectively.

Unemployment in agricultural labour meant, on the one hand, total unemployment for a certain proportion of the labour force; on the other, it referred to the number of days for which the reporting wage labourers were unemployed. On an average, 16 per cent of the labourers were chronically unemployed. Of those who reported wage employment, the period of employment covered 82 days on an average in the year. The following table gives the position of unemployment among agricultural labourers.

EMPLOYMENT AND UNEMPLOYMENT IN INDIA : 1951*

(Average days per year)

				Employment in		Un- employed	Self- employed
				Agricultural Labour	Non- agricultural labour		
Men	All ..	..	..	189	29	82	65
	Casual ..	..	..	167	33	90	75
	Attached ..	..	..	315	11	19	20
Women	..	..	..	120	14	..	..

p. 72. Agricultural Labour—How They Work and Live, Government of India, 1954,

Unemployment was prevalent to a much lesser extent among the attached labourers than the casual labourers. On an average, the attached labourers were unemployed for only 19 days in the year. In the case of casual labourers the bulk of the unemployment was due to want of work ; the scope for self-employment in their case was also limited and the incidence of unemployment depended largely and in an inverse ratio upon the scope for wage paid employment.

Wages : Wages are fixed either on time or on piece basis. The payment also is either in cash or in kind or partly in cash and partly in kind. Wages in kind are determined by the customary practices prevailing in the different regions. In addition to regular wages, the agricultural labourers also received food and other perquisites. The enquiry shows that cash payment on time rates has become the predominant mode of wage payment for about 95 per cent of the wage days. Over 58 per cent of wage days were paid in cash. The practice of giving perquisites was noticed for 33 per cent of the wage days work. Generally cash wages were more prevalent in regions where commercial crops were grown or which were having easy accessibility to urban areas, industrial establishments and plantations. The less developed regions in transport and communications where agricultural economy was more of a subsistence type, reported wages in kind. Thus, in Western India, North-West India, Assam and West Bengal in East India cash wage system was much more common.

The average daily wage of the adult male casual worker in agriculture was annas 17·5. In North India wages were slightly higher than the average for All India while in South and Central India wages were much lower. For women workers the All India average was annas 11. The nature of perquisites drawn in addition, however, show considerable variations in different regions. They mainly consisted of breakfast and/or midday meal, tea, coffee, tobacco etc. The money content of the perquisites is generally estimated at 25 per cent of the wages inclusive of perquisites. They ranged between $\frac{1}{4}$ and $\frac{1}{3}$ of the daily wage of men and women. In North India the value of perquisites was very low, about 14 per cent of the daily wages including perquisites.

Classifying wage payment on the basis of agricultural operations, it was found that the highest daily wage of annas 20·2 was paid for harvesting. Threshing and transplanting were also paid high rates, about annas 19·3 and 18·5 respectively. The lowest paid operation was weeding at annas 14·3. Only in South and East India the harvesting operation was not paid at the higher level. This might perhaps be due to the employment of women for harvesting operations in these regions. In non-agricultural labour, the adult male worker received annas 17·2. The average wage rates are indicative only of the general trend and do not reflect the variations in wages among individual workers engaged in different agricultural operations when large areas are taken into account. About half the man-days worked by men were paid at wages ranging from 10 annas to 19 annas. The wages were even below annas 10 for about $\frac{1}{8}$ th of the man-days. While $\frac{1}{3}$ of the man-days were paid at wages above annas 18, only for 8 per cent of man-days men earned annas 30 or more a day. Against an average wage of annas 17·5 for men the standard deviation was about 7·5. The co-efficient of variation was thus about 43 per cent in the case of men. In the case of women workers about $\frac{1}{8}$ th of the man-days were paid at less than annas 6 and another $\frac{2}{3}$ rd upto 14 annas and the remaining $\frac{1}{5}$ th about 14 annas. The wages for women showed a slightly higher dispersion, the co-efficient of variations being about 51 per cent as against 48 per cent per man.

Very often the wage level is depressed by the petty holders of land in the village who are willing to work for wages so as

to supplement their meagre income from the land. It is, therefore, not surprising that in some villages the wages of agricultural labourers are still at the same low level as they were in 1916 or even earlier. The wages of agricultural labour have been stabilised at a very low level and the recent All India enquiry as well as the regional enquiries do not indicate any rise in the level of wages for the different operations.

Child Labour : While it is conceded that there is unemployment and under-employment among the agricultural labour class, child labour has also been utilised in certain regions when seasonal conditions create a pressure on the supply of labour available. The reason may also be that child labour constitutes an integral part of family labour.²⁸ The estimated number of child workers, drawn from the age group of 10 to below 15 years was about 1.6 million or 4.6 per cent of the total agricultural labourers during 1950-51. The percentage of child workers varied from 1.4 in North India to 8.2 in Central India. In the Central Zone productivity is the poorest and wage levels are also at the lowest. These factors explain the employment of men, women and children in agricultural operations.²⁹ Almost 77 per cent of the child workers were casual. On the other hand, in Pepsu and North-west of Punjab as many as 31 and 25 per cent respectively of child workers were employed as attached labourers. The percentage of attached child labour was also high in West Bengal 48 per cent, Orissa 44 per cent and Hyderabad 42 per cent.³⁰ In India, as a whole, the period of employment for child labour constituted only 4.2 per cent of the man-days worked by all agricultural labourers, including 0.4 per cent of the total man-days worked in non-agricultural labour. On an average, child labour was employed for 165 days in a year, 150 in agricultural and 15 in non-agricultural work. The casual labour in the child group was paid on an average 11.1 annas per day in agricultural and 9.9 annas in non-agricultural wage employment. The highest wage was paid in North-West India and the lowest in Central India. In the total

28 The quantitative assessment of child labour in India should, therefore, be taken with caution.

29 See the Preliminary Report on the World Social Situation, UNESCO, p. 241.

30 However, in the sample villages of Orissa, Mysore and Travancore-Cochin, no attached worker was reported from among children.

agricultural labour income of Rs. 790 crores, children had a share of Rs. 9 crores or 1.1 per cent of the wage bill.

Income : In the national income of India, agriculture, other than plantations, accounted for Rs. 4,800 crores as estimated finally. In this, the total wage bill for hired agricultural labourers was estimated at about Rs. 500 crores.³¹ The estimated wage bill formed 10.5 per cent of the National Income from agriculture. The casual worker alone accounted for about 8.5 per cent. In the total wage income of all casual workers, adult males contributed Rs. 310 crores or 73 per cent and women workers Rs. 106 crores or 25 per cent. Of the total wage bill of Rs. 425 crores contributed by men, women and child casual workers, wages in cash and in kind including perquisites accounted for Rs. 242 and 183 crores respectively. The perquisites were valued at Rs. 44 crores.

The methods of remuneration and terms of employment under contract of the attached workers showed such a variety that the wage rates were not amenable to statistical tabulation. The types of work for which the attached labourers were employed could not be distinguished for calculation of wage payments. However, the estimated wage rate per day of the attached worker was noticed to be lower than that of the casual labourer. In calculating the total income of the latter, this has to be viewed against the quantum of the employment available to the two categories of workers.

Comparison of Wage Rates : A comparison of the wage rates in agriculture and in plantations as well as small factories and establishments shows the weak position of agricultural labour. In Madras, the plantation wage is higher, being about 125 to 140 per cent of the agricultural wage. But exceptionally enough, the plantation wage is only between 60 and 70 per cent of the agricultural wage in Assam and between 70 and 20 per cent in West Bengal. However, the earnings of the factory workers seem to be uniformly higher than that of the agricultural labourers. In the Indian Union, as a whole, the factory wage was on an ave-

³¹ Final Report of the National Income Committee, February, 1954, p. 45.

rage three times the daily wage in agriculture.³² Generally therefore, either when compared to the position of agricultural labourers in the West or when compared to the other categories of labour in India, the agricultural labourers receive an income which is very much less than that necessary for their minimum needs. With such a low standard of incomes, the efficiency of Indian agricultural labour has suffered considerably in comparison with that of the agricultural labour in the West.

Forced Labour : The low standard of incomes and the inevitable consequence of growing indebtedness among agricultural labour have reduced the class of permanent labourers among them to a position of serfdom in most of the areas. The incapacity of this type of labour to discharge the terms of the contract has rendered the workers permanent slaves of the landlord-creditor. These labourers offer themselves and their family to work in return for the debt which they owe and which they can repay in no other way. Though the Constitution of India guarantees protection against forced labour, the lack of adequate information on the position of the attached workers has prevented the extension of executive action to this category of workers on the administrative plane. The *Kamias* of Bihar and Orissa, the *Pannaiyals* of Madras, the *Pulayas* of Malabar and the *Halis* of Gujerat have been well-known instances of this type of forced labour. Usually, the contract begins with an advance of Rs. 100 to 150 from the landlord and the grant of a house-site and in some cases, a piece of land which form the original debt which binds them as serfs. As for the redemption of these workers from the clutches of the landlord-creditor, the Royal Commission on Agriculture observed, "the *Kamias* are bound servants of their masters in return for a low receipt. They bind themselves to perform whatever menial services are required by them in lieu of the interest due on the loan. The *Kamia* never sees any money, unless it be the occasional few pice he may earn in his spare time. Consequently he has no chance of ever repaying the principal of his debt and becoming free again. A *Kamiauti* bond therefore involves a life sentence." In the absence of recent data it will have to be presumed that such practices

³² The daily earnings in factories relate to perennial industries employing skilled labourers also.

prevail in a concealed form though the social reform measures must have gone a long way in mitigating the hardships involved in such types of labour.³³

Trend in Wage Rates and Prices : The controversy regarding rural prosperity relates only to the recent war period (1940-1945). The trend in wages and prices on the basis of the available data indicates that in 1950-51 as compared to 1938-39 wages either lagged behind in most of the States or just kept pace with the prices except in Madhya Pradesh and Pepsu where the wages rose faster than prices.

AGRICULTURAL STRATA

The traditional stratification of the rural population on the basis of caste was disturbed even as early as the latter half of the 19th century. In the present stage of economic change, the agricultural strata are largely determined by contemporary tendencies in the degree of survival of various types of the old agricultural enterprises. In any case, the socio-economic changes in the country in the last one hundred and fifty years have definitely loosened the ties of relationship between caste and occupation. The early years of this century marked the transition from the communal type of farming to the individual system of economic activity associated with a host of other tendencies created by the impact of foreign political domination. These intensified the problems of agrarian settlement in the country. In the beginning there was a manifest tendency towards an increased concentration of land in the hands of capitalistic entrepreneurs with the consequent increase of landless agricultural proletariat. The growth of rent-receivers and non-agricultural classes in rural areas and the decrease of peasant cultivating proprietors were the prominent features of change. The immediate effects were to increase the social distance between various aggregates and thus create considerable conflict and antagonism between them.

The weakening of the institution of caste and the progressive abandonment of hereditary occupations impaired, to a serious degree, the traditional vitality of rural hierarchies and communal

³³ The Agricultural Labour Enquiry (1950-51) does not seem to have gone fully into the examination of the position of such serf-labour still persistent in India.

functionaries. This economic retrogression in agriculture in India began with the vast migration and shifting of population within various occupations. From 1891 to 1911, nearly 23 million people deserted industrial occupations in favour of agriculture. During 1911-1921 another 10 million were drawn to agriculture. This transference from the various industrial pursuits to agriculture during the three decades 1891-1921 was a loss both to agriculture and industry.³⁴ The commercial policy of the Government on indigenous industries was accompanied by the disastrous effect on the hereditary occupations of the agricultural population being destroyed. The rise in agricultural prices between 1911-21 and the realisation of large profits also contributed to the attraction of vast numbers to the occupation of agriculture. The outstanding feature of this transformation was the dislocation of rural social solidarity and the disintegration of village communal life.

The introduction of Western notions of property and tenancy legislation resulted in free mortgages and transfers of land. The decline of subsidiary cottage industries facilitated this process. The peasants were driven off the land to supplement their income from land by outside work or to sell their lands to middle-men or to more prosperous peasants.

The agricultural population, therefore, do not constitute a homogeneous group. The inclusion of *Brahmins*, *Kshatriyas*, *Vaiśyas* and *Sudras* including the lowest class of untouchables in the ranks of cultivators and field workers shows that it is difficult to assign to-day, to any caste, a definite occupation or group of allied occupations with which it is intimately associated. The extent to which different castes hold land both as ancestral owners and proprietor landlords varies from region to region. But the prominent fact is that the higher castes, *Brahmins*, *Thakurs* and *Saiyids* constitute the bulk of land owners whereas the lower castes are predominant among cultivating tenants and landless labourers. In all parts of India, the new agrarian class system which has been imported from the economic system of the West has been substituted

³⁴ R. Balakrishna, *Industrial Decline in India*, p. 3.

for the traditional occupations of castes with the breaking up of the social and religious rigidity. In this changing phase, many castes have gone high and others low in social status. The *Bhuinhars* and *Tagas* who claim to be *Brahmins* by giving up their priestly occupations and taking up a secular life of agricultural labourers have been socially degraded. On the other hand, the *Doms* and *Guriyas* by leaving their degraded occupations in favour of cultivation have risen in social status. Similarly the *Chamars* and *Koris* and other lower castes have all gone a step forward in the social ladder simply by taking to agriculture.³⁵ Thus agriculture is followed by all castes and classes of people. Broadly, the strata may be classified as below.

(1) Owner cultivators and tenants of large holdings who generally belong to higher castes or whose hereditary occupation was cultivation, e.g., *Brahmins*, *Rajputs*, *Thakurs*, *Kayasthas*, *Tagas*, *Saiyids* and *Pathans* ;

(2) Cultivating tenants or farm hands who are recruited both from high and low castes. Usually they belong to the caste of the employer or the landlord. The majority of this class considers agriculture as its principal occupation though not hereditary occupation, e.g., *Kurmis*, *Vaishyas*, *Gujars*, *Ahirs*, *Jats*, *Sheikhs* and *Pathans*. Mostly, these are the castes who acquired lands during the transition period of displacement in agriculture ;

(3) Field workers or permanent labourers who are recruited mostly from lower castes. These claim agriculture as the subsidiary occupation, e.g., *Julahas*, *Lodhs*, *Chamars*, *Kumhars*, *Telis*, *Khatiks* and *Koris* and similar tribes ;

(4) The landless casual labourers are recruited from the lowest rung of the social ladder. They have no definite described means of livelihood. This class also includes the agricultural serfs who abound in Northern India and in parts of Southern India. They are drawn mostly from the aboriginal and the depressed castes.

³⁵ In the Census of 1891 a special tabulation was undertaken to ascertain how far *Pallas* and *Parayas* (submerged classes) have become *Pattalars* (owners) or tenants in the districts of Tanjore, South Arcot and Chingleput. In Chingleput it was 35·6 and South Arcot it was 40·5.

With the creation of such a complex in agricultural strata, there has been different standards of efficiency in agricultural operations. On the one hand, there are cultivators from the higher castes who, like the Brahmins, have taken to agriculture only as a side occupation. Their caste attitudes prevent them from directly participating in the agricultural operations either by driving the plough or harvesting the product. They, therefore, employ hired labour which is cheap but inefficient to cultivate the lands. Or, they lease the lands on crop-sharing basis or on other fixed terms. Similarly, sub-tenancy is noticeable also among the genuine cultivators such as the *Patidars* of Charotar. It has been noticed that, not unoften, even the *Kunbi* would cease to be a cultivator and rent his lands to a tenant, his ambition being to educate his sons and to qualify them for non-manual occupations such as government service, profession or trade. Such landlords are obviously interested not in agricultural development but in obtaining the maximum possible rent from their tenants. They usually squander their income on expensive caste customs and usages instead of investing in land improvement and thus, to an extent, have a demoralising influence on the lower castes who have taken to cultivation but who have also imitated the social habits of the higher classes. How far the social reform measures and the legislation to give protection to tenants have improved efficiency in agriculture is a matter still for investigation.

At the other extreme are more than twenty-five million aborigines who largely depend on agriculture, forestry and huntings. They still carry on their occupations in the primitive manner fighting against several odds, their own ignorance and poverty and not the least, the deprivation of their hereditary rights over forest and forest lands. "Forbidden to hunt and cultivate in the forests, exploited in the villages they have become servile, obsequious, timid and of poor physique." An increasing number of them are thus being driven to the borders of the villages in the developed plains where they eke out a living as casual agricultural labourers. In between these two extreme types of agriculturists there are the smaller peasants and the lower classes of cultivators under different systems of tenancy or even sub-tenancy. These tenants were till recently rolling stones paying high rents as tenants-at-will and having no fixity of tenure or adequate rights

enjoyed by other class of tenants. They possess the least equipment of livestock and implements and have small scattered holdings. Most of them are agriculturists under pressure of circumstances and have not the adequate knowledge of efficient methods of cultivation. The system of cultivation in operation under the above categories of cultivators does not admit of a definition of efficiency according to any standard of agricultural economics.

AGRICULTURAL EFFICIENCY

Dr. Voelcker in his exhaustive report on agricultural practices in India paid a high tribute to "the careful husbandry combined with hard labour, perseverance and fertility of resources" of the Indian agriculturist. But nearly half a century of desintegration in the agricultural economy has made his laudatory remarks to appear as mere historical reflections. As lands had passed from the cultivating to the non-cultivating classes and as increasing numbers who were drawn out of their traditional occupation by forces beyond their control had constituted themselves as a separate class of landless agricultural labourers, the average efficiency of the Indian farmer greatly deteriorated. In general, the low class of agriculturists suffer still from the limitations inherent in cultivating lands under landlords who are more or less feudally inclined. On account of their low social status and lack of security, the lower castes have to pay higher rent and higher rates of interest if at all credit is made available to them. The percentage of usurious debt is greater in the case of the low income groups than in the case of higher castes whose indebtedness is mostly on account of improvident expenditure.

The influx of persons from all castes into agriculture has had unhealthy effects on the efficiency of agriculture. Nearly 70 per cent of those employed in agriculture are uneconomic cultivators. In the past, under the rigidity of the caste system labour in the villages was sub-divided, specialised and standardised. Thus maximum efficiency of every worker in his allotted function was assured and a definite relation between caste, its labour value and economic efficiency was established. Since this has been broken, it is found that a large majority of those who are forced by circumstances to take to agriculture have neither the adequate

equipment, knowledge nor training to pursue their occupations profitably.

INCOME IN AGRICULTURE

Agriculture including animal husbandry and ancillary activities is the basis of livelihood for 71·8 per cent of the population. If the working force in forestry and fisheries (who constitute 0·6 per cent) is also included, the total population supported by agriculture will account for 72·4 per cent as compared to 10·6 per cent in mining and manufactures, 7·7 per cent in commerce, transport and communications and 9·3 per cent in other services. The major contribution to the national wealth of India is still made by agriculture and therefore the efficiency or otherwise of the population who are operating the industry must leave its impress on the economic condition of the people as a whole in the country. Though estimates of the annual *per capita* income for the whole country have been made by early economists, the first scientific attempt at measuring the national income was made by Dr. V. K. R. V. Rao. According to Dr. Rao, agriculture, despite its predominance in the country's occupational structure contributed only Rs. 6,000 million or 38 per cent in 1931-32 whereas industry in which only 15 per cent of the total workers were engaged contributed Rs. 3,000 million or 19 per cent to India's national income. Even incomes from services (including road transport, Government and domestic) in which 13 per cent of the total workers were employed amounted to Rs. 4,000 million or 23 per cent of the total income. The resulting breakdown of *per capita* income was Rs. 307 in services, Rs. 195 in industry and Rs. 133 in agriculture.³⁶ The estimates of the National Income Committee for 1950-51 reveal that agriculture contributed nearly Rs. 4,900 crores or 51·3 per cent to national income as against Rs. 1,500 crores or 16·1 per cent contributed by mining and manufacturing, Rs. 1,700 crores or 17·7 per cent by commerce, transport and communications and Rs. 1,400 crores or 15·1 per

³⁶ Dr. V. K. R. V. Rao, *The National Income of British India, 1931-32*, pp. 187-189. The method followed by Dr. Rao in his estimate of the National Income of India has been accepted to be similar to the estimates made by the National Income Committee (1948-49). The only difference seems to lie in the smaller measure of inaccuracy in the latest report than that of Dr. Rao, mainly because of the availability of more data to the former.

cent by services.³⁷ The position does not seem to have changed much in the last two decades except for the increase shown in the contribution of agriculture to national income.³⁸ The *per capita* income of India has been estimated for 1950-51 at Rs. 500 in agriculture, Rs. 1,000 in mining and manufacturing, Rs. 1,500 in commerce, transport and communications and Rs. 800 in services. As figures for *per capita* income over a series of years are not available, no conclusions can be drawn regarding the progress that has been made in this direction except in the four years since 1948-49 for which figures have been compiled.

The overall position indicates that the income is low when compared to other countries. In terms of absolute necessities of civilised life, the low *per capita* income shows that the country is far behind in the provision of the minimum standard of needs. Not only is the income low, but its distribution also is noticed to be highly uneven. The condition of the majority is therefore much worse than is indicated by the figure of *per capita* income. Among the urban classes, for instance, nearly 48.4 per cent of the total income is concentrated in the hands of only 11.6 per cent of their number. If an analysis is made of the well-to-do classes composed of those whose income exceeds Rs. 2,000 a year it is found that a little more than 1 per cent are in possession of as much as 10 per cent of their total income. The inequality between rural and urban incomes is still more glaring. The *per capita* rural income works to Rs. 547 as against the *per capita* urban income of Rs. 2,392.³⁹ While the comparatively high figure of *per capita* rural income in 1950-51 may indicate that incomes have risen during the war period; it is doubtful whether the rural income *per capita* has shown an improvement in real terms. There has been in fact, a higher proportion of increase in urban incomes and the increase in both the cases have been mostly due to the inflationary rise in prices after the war. At constant prices the *per capita* income has not shown any increase.

37 The estimates for 1955-56 are : agriculture Rs. 4,980 crores; mining and manufacture Rs. 1,750 crores; commerce, etc., Rs. 1,970 crores; and other services Rs. 1,720 crores. Report on Currency and Finance, 1956-57, Reserve Bank of India (1957).

38 However this increase cannot be taken as reliable, as the data for comparison are not based on uniform coverage.

39 In the calculation of *per capita* rural and urban incomes, only self-supporting persons of the total rural and urban population are taken into account ; but, in the case of Jammu and Kashmir, as figures of self-supporting rural and urban population are not available, they include besides self-supporting persons, dependents also.

HEALTH AND EFFICIENCY

The efficiency of work, either in agriculture or industry, is determined by the energy and capacity of the working population. The latter are largely the products of the state of public health in the country. The potential of man-hours available for productive work in relation to the total number of persons maintained by the nation will therefore vary with the state of public health. A positive state of health implies complete adjustment of the individual to his total environment, physical and social. The extent of nutritional deficiency in the country will provide a measure of the state of positive health. The state of morbidity has also to be ascertained by mortality statistics which are the only data available.

The standard of health as indicated by the death rate and the infantile mortality rate is low. The specially vulnerable group in the community are children and women in the reproductive age groups. Nearly 40 per cent of the total deaths are among children under 10 years of age and mostly the mortality in this age group takes place within the first year. As compared to England and Wales, India has a child mortality of 20·5% for under 1 year against 4·7% in England, 15·8% for 1 to 5 years against 0·9% and 5·6% for 5 to 10 years against 0·4%.⁴⁰ The maternal mortality in India is estimated at 20 per thousand live births which is very high. Annually, there are about 2 lakhs of maternal deaths. The morbidity resulting from causes associated with child-bearing alone is estimated at about 4 million. From the ratio of deaths per 1000 of population in India during 1940-1949, it is noticed that the epidemic diseases account for 5·1 per cent of the total mortality. The fact that more than half the deaths are recorded under fever by the reporting agency reveals that there is no means of proper diagnosis of the cause of death, particularly in the rural areas.

The low state of public health is reflected in the wide prevalence of diseases and the high rate of mortality. Regarding the positive state of health, the conclusions reached on the basis of the Results of Diet Surveys in India from 1935 to 1948 indicate that "the average diet of an

⁴⁰ Report on the First Five-Year Plan, Planning Commission, Government of India, p. 489.

Indian is lop-sided primarily because of its high cereal content. The other noticeable feature is that the diet lacks in adequate amounts of protective foods leading to inadequacy and very often to total lack of proteins of good quality. Inadequacy of minerals and most of the important vitamins in varying degrees is the other important feature. It appears that two-thirds of the families did not consume any fruits and nuts at all. About one-third of the families did not consume sugar and jaggery, meat, fish or fleshy foods and a quarter of the family groups did not consume milk and milk products or leafy vegetables. Again, among groups of families consuming particular vegetarian food stuffs, the intake of leafy vegetables, other vegetables, ghee and vegetable oil and pulses was below the desired or recommended level." Any generalisation on the above data may not be fully valid ; yet, in about four-fifths of the families surveyed, the intake of protective foods was either nil or below the standard. In fact, the Joint Committee of the Indian Council of Medical and Agricultural Research who suggested an integrated plan of human and animal nutrition in relation to agricultural production, finding large gaps between the requirements and the available surplus, had to modify their plan on the basis of utilising maximum potentialities of cultivable acreage, scientific methods of increased crop production and modified targets of human requirements. Thus there is no doubt that mal-nutrition is the prominent cause of high infantile, maternal and general mortality rates in India.

Though complete statistics are not available regarding the incidence of various diseases on the mortality rates, some of the prominent diseases are analysed to indicate the position.

Malaria : About a million deaths are caused every year by malaria and about one hundred million people suffer from this disease. The economic loss is estimated at several hundred crores of rupees every year due to vast fertile areas remaining fallow and natural resources remaining unexploited largely due to the ravages of this disease. The congestion of labour in irrigation, hydro-electric and industrial project areas is often attended with severe outbreaks of malaria. So far only about 30 million out of the 200 million population exposed to malaria have benefited by the existing control schemes.

Tuberculosis : While accurate data are not available, 500,000 deaths are reported to occur every year and about two and a half million people suffer from active disease. It is estimated that about nine hundred to one thousand million man-days are lost. Apart from the excruciating human misery, the economic loss is incalculable.

Filariasis : Filariasis is another widely prevalent disease in some of the coastal regions with high humidity and heavy rainfall. It is estimated that there are about 157 million cases in Asia of which the quota for India must run into many millions.

Venereal Diseases : The incidence of venereal disease in India is unknown but sufficient data now exists to suggest that in large cities, particularly, Bombay, Calcutta and Madras, the prevalence of the disease is high, reaching 5 to 7 per cent of the population for syphilis alone. The problem in rural areas is not definitely ascertained but the hill tracts extending from Kashmir to Assam (especially Kashmir, Kulu, Himachal Pradesh and Assam) appear to have an alarmingly high prevalence of syphilis. The importance of this disease in producing sickness and incapacitation for work cannot be over-emphasised.

Leprosy : The number of cases of leprosy in the country is estimated at one million at the least. Besides, about one-fourth of a million are reported to be lepromatous. The highly endemic areas of this disease are certain parts of West Bengal, Orissa, Madras and Kerala. The incidence is remarkably small in the rest of the country. In the highly endemic areas, the incidence may range from 2 to 5 per cent of the population.

Cancer : The incidence of the malignant disease of cancer is much the same as in Western Europe and North America. The annual death rate in most countries varies from 100 to 150 per 1000 living persons of either sex. The conservative estimate of cancer deaths in India is 200,000 per year. The rate may probably go higher with an increase in the proportion of population in older-age groups.

Mental Diseases : Although little information is available regarding mental ill-health in the country, the number of persons

suffering from varying degrees of disorder who may not require hospitalisation but should receive treatment and of those suffering from mental deficiency is likely to run into several millions.

At the back of this poor physical condition of the people and the prevalence of various diseases is their low purchasing power. The *per capita* income and the state of public health react upon each other to a marked degree in India. According to the National Sample Survey estimates, the value of medical expenditure was Rs. 1.77 or 0.80 per cent of the total expenditure per person (1949-50). The corresponding expenditure on medical service was Rs. 1.03 per person or 0.47 per cent of the total expenditure in the same period. Such a condition is deplorable not only because there is wastage of life much of which could be prevented but because it incapacitates many others for work and reduces their economic efficiency.⁴¹ The improvement of efficiency in production would largely depend upon a public health policy which would release large areas of the country at present gripped in the stranglehold of disease and materially help to raise the economic condition of the people.

41 The terrible lowering of general health in India owing to the prevalence of endemic diseases such as malaria, hookworm, elephantiasis, tuberculosis and *kala azar* is recognised by all, and its effects on efficiency can well be imagined. See Vera Anstey, *The Economic Development of India*, p. 67. Hook-worm called in England 'miners' *ankylostomiasis* exists amongst some 80 per cent of the coolies in the Darjeeling tea plantations, and is almost equally prevalent throughout the greater part of the plains of Bengal. *Vide* Lord Ronaldshay, *India : A Bird's Eye View*, p. 277. In certain districts of Madras, over 90 per cent of the population is infected. Yet a cure for hookworm is known and in Ceylon treatment for the disease has in some areas increased the output of labour by no less than 25 per cent. *Vide* Industrial Commission, Appendix L.

It is stated on authority that in India the number of deaths annually resulting from preventable diseases is about 5 to 6 million ; that the average number of days lost to labour by each person from preventable diseases is not less than a fortnight to three weeks in a year ; and that the loss of efficiency of the average person from preventable mal-nutrition is not less than 20 per cent. *Vide* All India Conference of Medical Research Workers (1924 and 1926).

CHAPTER III

AGRICULTURE

EXTENT

Government classification of land is primarily into five classes : (1) forests,¹ (2) areas not available for cultivation,² (3) other uncultivated lands excluding current fallows,³ (4) current fallows⁴ and (5) net areas sown.⁵ Table 1 indicates the distribution of land in India among the major uses according to the official classification.

1 The forests include all actually forested areas whether State-owned or private. If any portion of such land is used for agricultural purposes that portion is excluded from the forest area and included under the appropriate head of cultivated or uncultivated area.

2 This is subdivided into two classes : (i) land put to non-agricultural uses, i.e., all lands occupied by buildings, roads and railways or under water and (ii) barren and uncultivable lands, i.e., mountains, deserts, etc., which cannot be brought under cultivation except at a high cost whether such land is in isolated blocks or even within cultivable holdings.

3 This is sub-divided into three classes : (i) permanent pastures and other grazing lands which include all grazing lands whether permanent pastures, meadows or not, village common and grazing lands within forest area, (ii) miscellaneous tree crops and shrubs which are not included in the net area sown, as for example, land under casurina trees, falling grasses, bamboo bushes and other fuel groves, (iii) cultivable wastes which include lands available for cultivation whether or not taken up for cultivation or abandoned after a few years for some reason ; such lands may be either fallow or covered with shrubs and jungles and may be assessed or unassessed, lying in isolated blocks or within cultivated holdings. Land once cultivated but not cultivated for five years in succession is also included in this category.

4 This is sub-divided into two classes : (i) fallow lands other than current fallows which include all land taken up for cultivation but are temporarily out of cultivation for a period of not less than one year and not more than five years. The reasons for keeping them fallow may be either (1) poverty of cultivators, (2) inadequate water supply, (3) malarial climate, (4) silting of canals and rivers or (5) unremunerative nature of farming; (ii) current fallows which comprise cropped areas which are kept fallow in the current year.

5 The net areas sown consist of all lands sown with crops or orchards.

Vide Indian Agricultural Statistics 1950-51, Vol. I (Summary Tables), Government of India, 1954, pp. ii and iii.

TABLE 1
LAND USE IN THE INDIAN UNION

Classification of Land Area	1953-54		1949-50	
	Area (in thousand acres)*	Percent- age of total	Area (in thousand acres)	Percent- age of total
Gross area	8,10,800	100.0	8,10,800	100.0
Unclassified area	91,800	11.3	1,31,600	16.2
Classified area	7,19,000	88.7	6,79,200	83.8
Net area sown	3,13,000	38.6	2,83,200	34.9
Fallow lands other than current fallows ..	31,300	3.9	43,100	5.3
Current fallows	30,000	3.7	26,400	3.3
Other Uncultivated land excluding current fallows	98,000	12.0	1,15,300	14.2
Not available for cultivation	1,18,600	14.6	1,21,000	14.9
Forests	1,28,000	15.8	1,00,900	12.5
Area sown more than once	38,600	..	38,100	..
Gross area sown	3,51,700	..	3,21,300	..
Net Irrigated area	53,700	..	49,800	..

Source : Agricultural Statistics of Reorganised States, Directorate of Economics and Statistics, Government of India, 1956, pp. 14-15 and 34.

* Rounded off to the nearest thousand.

Unclassified Area : Out of the total geographical area of India of 810.8 million acres, the reporting area in 1953-54 was 719 million acres.⁶ Thus a total of 91.8 million acres remained as non-reporting. In the non-reporting areas excluding the hill, desert and inaccessible areas, there are also areas either under specialised forms of land tenure which are not reporting because land records are not maintained or are surveyed and remained unestimated. The non-reporting area represents 11.3 per cent of the geographical area.

Net Area Sown : The net area sown totals 313.05 million acres or 38.6 per cent of the land area of the country. The area sown more than once which forms 38.64 million acres or 12.3 per cent of the net sown area plus the net area sown gives the total acreage of

⁶ The total geographical area includes Jammu and Kashmir. The statistics on land classification and use are from Agricultural Statistics of Reorganised States, 1956, and refer to the year 1953-54.

crops sown or what is termed as gross area sown at 351·69 million acres. The net area sown has recorded an increase of 29·85 million acres in the five years ending with 1953-1954. Out of this 9·9 million acres are accounted for by the single State of Rajasthan alone, where the reporting area itself has increased considerably.

The significant fact brought about by the size of total cultivated area is the low percentage of areas sown more than once. The physical factor of temperature influence is not unfavourable in India to continuous plant growth. On the other hand, it is sufficiently high to permit uninterrupted cultivation throughout the year. The main factor of limitation is the deficiency of moisture. The concentration of rainfall in a short period of two to three months in most parts of the country makes it difficult for the crop to obtain adequate moisture throughout the year; either they have to depend on irrigation or sub-soil moisture, in both of which the Indian Union is deficient. The insufficient application of manure and fertilisers is also a contributing factor to the low level of fertility of most of the crop lands reported. The scope for increasing the area that can be sown more than once would obviously depend on the speed with which irrigation works are extended and facilities provided for continuous and adequate water supply and on the measures taken to condition the soil to the normal level of fertility by a judicious application of manures and fertilisers.

DISTRIBUTION OF SOWN AREA

The regional variations in the sown area are mainly determined by the physical conditions of climate, topography and soil. The Indo-Gangetic plains and the plains along the East and West Coasts record the highest percentages. As much as 80 to 90 per cent of land is under cultivation in many parts of these plains; the proportion is substantially low, 10 per cent or even lower in mountainous or arid areas. The four States of West Bengal, Bombay, Uttar Pradesh and Punjab together account for 34 per cent of the net area sown in the country though they form only 20 per cent of the total land area. The proportion of sown area in these States vary between 50 and 65 per cent. The percentage of area sown more than once is also higher in these States

than in most other parts of the country, ranging from 20 in Punjab to more than 30 in Bihar when compared to the average of 13 for the whole country. The proportion of cropped area to the total in the States of Peninsular India are much lower than in the plains and vary from 30 to 50 per cent. In Madhya Pradesh and Mysore, the percentage of cropped land is 35, in Madras 38 and in Hyderabad 46. In mountainous areas and arid zones, the acreages under crops are quite low ranging between 10 and 20 per cent of the land area. In Kutch, the proportion is as low as 7 per cent. The present distribution of the cropped land indicates the regional possibilities in extending the cultivation.

PRODUCTION

Food Crops and Non-Food Crops

The relative importance of the main crops in Indian agriculture is shown in Table 2. The food crops including fruits, vegetables, pulses, etc., cover 80·5 per cent of the total cropped area (1953-54), revealing the extent of land resources utilised for the production of the primary want. The food crops are grown almost entirely for consumption within the country. The non-food crops include some of the principal crops, partly for export, such as cotton, fibres and other oil seeds. The commercial crops of this variety occupy only 18·0 per cent of the cropped area while the plantation crops account for 0·8 per cent of the area cultivated (1952-53). Among the food crops, the cereals account for 61·3 per cent of the total area. The staple crops, rice and wheat form just about 50 per cent of the area under cereals. Despite the decline in the per capita sown area resulting from the relatively faster rate in growth of population, the per capita area under non-food crops has increased and has consequently materially reduced the acreage under food crops per head. However, during the war period there was a large diversion of area from non-food crops to food crops under the regulative measures of the Grow More Food Campaign.⁷

⁷ Economic opinion is divided on the issue whether during the war period the diversion from non-food crops to food crops was actually the result of Government measures under the Grow More Food Campaign or the inter-action of normal commercial factors. See Dr. V. K. R. V. Rao, *The Indian Journal of Agricultural Economics*, Volume IV, No. 1, March 1949, p. 239.

TABLE II
CROP PATTERN IN THE INDIAN UNION : 1953-54¹

Crops	Indian Union	
	Area in million acres	Percentage to total sown area
Total Food Crops	283.3	80.5
Total Cereals and Millets	215.8	61.3
Rice	77.3	22.0
Jowar	43.9	12.4
Bajra	30.1	8.5
Maize	9.6	2.7
Ragi	5.8	1.6
Small Millets	14.0	3.9
Wheat	26.4	7.5
Barley	8.7	2.4
Total Pulses	53.7	15.3
Gram	19.7	5.6
Tur	5.9	1.6
Other Pulses	28.1	8.0
Sugar	3.5	0.99
Fruits and Vegetables and Spices	8.4*	2.4
Other food crops	1.9*	0.5
Total Non-Food Crops	63.3	18.0
Total Fibres	19.0	5.4
Cotton	17.3	4.9
Jute	1.2	0.3
Oilseeds	27.2	7.7
Dyes and Tanning Materials	0.03*	—
Drugs and Narcotics	1.1*	0.3
Plantations	2.8*	0.8
Fodder crops	13.2*	3.7
Total Sown Area ²	351.7	—

* Refers to 1952-53.

¹ Indian Agriculture in Brief, Directorate of Economics and Statistics, Government of India, Second Issue, 1956, pp. 32-33.

² Agricultural Statistics of Reorganised States, Directorate of Economics and Statistics, Government of India, 1956.

Even in the war period, the reduction in the acreage of non-food crops was mainly noticeable in the case of cotton and jute. Other crops showed remarkable stability in maintaining the acreage, while the area under oil seeds actually showed a tendency to increase. The proportion of area under food crops to the total cultivated area increased from 56 per cent in 1938-39 to 60 per cent in 1945-46 in the Indian Union area.

The most important food crop throughout the greater part of India is rice. It is the chief article of diet of the inhabitants of Bengal, Assam, Bihar, Orissa and Madras. The health of the population is found significantly to be poor only in these States. The area recorded under rice is 22 per cent of the total cultivated area yielding a gross output of 24·21 million tons (1954-55). There has been no consistent expansion or reduction either in area or production, until 1951-52. In area, the range of variation is about 10 per cent on the lowest acreage in this half a century. The production however has varied within much wider limits, by about 70 per cent. The fluctuations in production are mainly ascribed to seasonal factors such as periodicity and distribution of rainfall, drought conditions, floods and attack of pests and diseases.

Wheat which has a nutritive value higher than that of rice, has a restricted consumption, and forms part of the usual diet of the people in the northern States of Uttar Pradesh and Punjab and the adjoining tracts. The area cropped under wheat is 26·4 million acres or about 7·5 per cent of the total area and provides about 8·54 million tons of grain (1954-55). There are several species under the general head of 'millets' which are also consumed by the low income groups of the agricultural population as staple diet. Of this, Jowar or larger millet (*Andropogon Sorgam*) and Bajra or bulrush millet (*Pennisetum Typhoidium*) and Ragi or buck wheat (*Elusine Coracana*) cover the largest acreage. These are comparatively coarse, inferior and cheap. The increase in the output of food crops has in fact been under these low nutritious cereals between 1910 and 1951.⁸ The production of bajra went up by 101·8 per cent, that of barley by 139 per cent and of jowar by 146·7 per cent, while rice during the same period has registered

⁸ The range of variation in the production of these cereals has been shown with reference to undivided India till 1938 and the Indian Union from 1938-39.

a decline of 16·2 per cent and wheat of 39·5 per cent. In fact there were violent fluctuations in the production of wheat from 1912 to 1922 and a gradual decline till 1927-28. There has been a slight upward trend only thereafter.

The resources in fruits, vegetables, milk, eggs and meat which provide necessary protective elements are hardly adequate and within the reach of the masses. The area under fruits and vegetables is only 5·6 million acres or 1·6 per cent of the total sown area. What India needs is not merely an increase in the quantity of food produced in the cereal group, but also an improvement in quality and greater attention to the development of sources which have not been hitherto utilised. How this greater and more varied supply can actually be made available to the people who at present, cannot simply afford to pay for them, is a more fundamental question of raising their purchasing power which in turn is the very core of the economic problem in agriculture.

Extension of Cultivation : The extent of the area classified under 'other uncultivated land excluding current fallows' and 'current fallows' should give an indication of the possibilities under extension of cultivation in India. The area under 'permanent pastures' and 'other grazing lands' as well as the area under 'miscellaneous tree crops and groves' may not be available for cultivation but the area reported under 'culturable waste' plus the fallow lands (even under the present classification), should be recognised as lands which can be brought under cultivation. The area classified as cultivable waste is 120·8 million acres or 17·2 per cent of the classified area. The proportion of such lands available for cultivation is as high as 42·3 per cent in Vindhya Pradesh, 37·5 per cent in Rajasthan, 36 per cent in Ajmer, 25·6 per cent in Hyderabad, 23 per cent in Coorg, 22·8 per cent in Pepsu, 21·5 per cent in Madhya Bharat and 20·9 per cent in Bhopal.

It must also be noted that large areas in this class, though now reported to be unfit for cultivation, have been under cultivation one time or other and reflect the extent of waste caused by human neglect. The need for these residual class of lands being properly and adequately surveyed, with particular reference to

their period of non-use, the resultant physical encumbrances, the scope and conditions and the cost for reclamation is also indicated. According to the Planning Commission, the total area that can be reclaimed from this class is reported to be only 15 million acres of which about two-fifths is in the region of Madhya Pradesh and the remainder, mostly in Madhya Bharat and Vindhya Pradesh. Under the area returned under current fallows, the five States of Hyderabad, Madras, Bombay, Madhya Pradesh and Bihar, record the largest acreage and account for about 43·3 per cent of land under this class. Hyderabad alone has almost one-fifth of the total.⁹

It is probable that wherever the dry system of farming has been followed, as in many parts of Bombay under which a plot of land is cultivated only once in two, three or four years, large areas should be expected to be returned as fallows. There has been a marked and steady increase under acreage reported under current fallows, particularly in the State of Hyderabad. In a country like India, where the scarcity of cultivable land is so much felt, the extent of loss in utilisation needs to be ascertained precisely. The question is also of great significance in the context of the need for raising the level of agricultural production to a standard of the minimum nutritional requirements of the population in the country. It would be wrong to hazard any definitive conclusions on the scope for extension of cultivation on the basis of the data available. At best, the points bearing on this question can only be indicated : (i) the possibilities of reclaiming areas for cultivation from unclassified areas (situated mostly in arid, mountainous or other regions of low productivity) are limited, (ii) similarly, there can be no reclamation from the areas classified as 'not available for cultivation,' (iii) there can be no further encroachment in the forest areas as there is a positive need for extending the area under forests than curtailing it, and (iv) under the areas 'other uncultivated lands and current fallows' the actual possibilities are determined by the factor of cost and the provision of irrigation facilities and state aid and disease control. In the short-term, it should be possible to reduce the area under current fallows by adopting a more suitable system of rotation of crops.

⁹ It is difficult to determine the extent of lands recorded as fallow due to physical conditions or the nature of farming in the years previous to 1950-51 when the new method of classification has been introduced.

LOW YIELD AND ITS CAUSES

The average yields of Indian crops have been consistently very low as compared with those of other countries. The differences in climatic and ecological factors which affect production and the differences in the methods of computation partly explain the difference. Still, the exceedingly low level of yields brings out the characteristic feature of Indian agriculture. The gradual fall in the yields of the principal food crops in the last half a century should be particularly a disconcerting trend. The yield per acre of rice has fallen from 963 lbs. in 1900-05 to 670 lbs. in 1951-53 and of wheat from 672 lbs. to 557 lbs. in 1946-50 and 606 lbs. per acre in 1951-53.¹⁰ The average yield of wheat per acre in India is one-third of that in Japan and one-sixth of that in Holland and Denmark ; in rice, it is nearly one-fourth of that in Italy ; in maize, one-third of that in Switzerland and one-fourth of that in New Zealand ; in sugarcane, one-third of that of Java and in cotton, one-sixth of that in Egypt.¹¹

REGIONAL VARIATIONS

The yield is not only low but shows wide variations between the States. Some variation in the average yield in different parts of the country is bound to occur owing to differences in fertility of soil, rainfall, etc. But this wide disparity as between Coorg (1,032 lbs.) and Madhya Pradesh (654 lbs.) in respect of rice, between Bihar (553 lbs.) and Bombay (326 lbs.) in respect of wheat, between Madras (5,609 lbs.) and Punjab (2,500 lbs.) in respect of sugarcane and between Punjab (214 lbs.) and Orissa (333 lbs.) in cotton, must be to a large extent due to a relatively low standard of cultivation in the under-developed areas. The causes for this situation are attributed to be (1) deterioration of soil, (2) inadequate or irregular rainfall, (3) unsatisfactory systems of cropping, (4) lack

10 In the *Ain-i-Akbari*, it has been computed that the average yield on the medium type of poolege (annually cultivated) land during the reign of Akbar was 2,240 lbs. on an acre of land (equal to the present average yield in Western Europe), 2,333 lbs. on rice land (equal to that in China) and 1,940 lbs. on jowar land. See S. Thirumalai, *Post-War Agricultural Problems and Policies in India*, 1954, p. 120.

11 Sir MacDougall, in explaining the economic loss on account of this very low yield in respect of wheat alone observed that "if the output per acre in terms of wheat were raised to that of France, the wealth of the country would be raised by £669 million a year. If the output were in terms of English production, it would be raised by £1,000 million . . . In terms of Danish wheat production, the increased wealth production would be £1,500 million." Sir MacDougall was one time President of the Co-operative Farms Trading Society of Scotland and one of the foreign experts to tender evidence before the Central Banking Enquiry Committee. See for his evidence, Report, p. 701.

of improved seed, (5) poor live-stock and other equipment, (6) subdivision and fragmentation of holdings, (7) lack of adequate credit facilities, (8) primitive system of marketing and above all (9) lack of initiative and enterprise on the part of the illiterate cultivators oppressed by an out-moded system of land tenure and tenancy. The facts on some of these fundamental factors are alone given below.

SOIL FERTILITY

Several causes have been responsible for the decline in the yield of crops in many parts of India. The wasteful practice of using cow-dung as fuel and the farmers' inability to purchase artificial fertilisers which are comparatively costly, have led to the removal year after year (in the form of produce) of all the valuable soil properties. At the same time due to human neglect, lands have been rendered unfit for profitable cultivation on the formation of injurious salts by the action of running rain and flood water either in eroding the surface soil or burying it beneath deposits of sterile material. This has been particularly noticeable in Uttar Pradesh and West Bengal where extensive areas on the banks of the large rivers have lost all value owing to the formation of ravines. It is estimated that in the U. P. alone 8 million of the total land area of 72·6 million acres have been so lost in addition to 5 million acres as a result of water-logging, shallow tillage and defective soil accretion. In the canal irrigated areas of Bombay-Deccan and the Punjab, the rise of the sub-soil water and formation of salt-efflorescence on the surface of soils have done considerable damage to cultivation. Water-logging has been a great menace to cultivation in Madhya Pradesh, Assam, Bihar and Bengal. In course of time, these factors have reduced the land area available for utilisation and converted large areas into semi-deserts.

The analysis of production trends in agriculture has given rise to the question whether the low yields of crops in India are the result of a decline in soil fertility or whether the standard of husbandry has been deteriorating. The results of a statistical study of the trends in yield rates from 1911 to 1945-46 undertaken by the Indian Council of Agricultural Research indicate that in respect of cash crops, there is clear evidence of generally increasing yield rates. In cotton, in the Punjab, the yield per acre has gone up

from 98 lbs. to 146 lbs. per acre and in Madras from 46 lbs. to 88 lbs. per acre. In sugarcane also an increasing trend has been noticed from 4,402 lbs. to 6,265 lbs. per acre in Madras and U.P., from 2,002 lbs. to 3,450 lbs. in 1936-37 and 2,628 lbs. in the last quinquennium. In the group of food grains there has been an increase of yield per acre of rice from 883 lbs. to 1,001 lbs. in Madras, the increase being mainly due to the extension of area under irrigation. In Bombay, there has been a slight decline from 926 lbs. to 896 lbs. while in Madhya Pradesh, the yield rate has been almost stationary. But, in the U. P. there is a decline from 685 lbs. to 544 lbs. In wheat, a general increase has been recorded in the Punjab from 706 lbs. to 806 lbs. In the U.P. and Madhya Pradesh, there has been a decline in yield rates—from 879 lbs. to 732 lbs. and from 550 lbs. to 367 lbs. respectively. The study has shown that in foodgrains particularly, a decline in yield per acre has generally been associated with an increase in acreage under the crop and the increase in the yield is associated with a general rise in the proportion of area under irrigation. It has also been noticed that in no States have all the crops studied, showed a consistent decline in the yield. It is, therefore, not possible on the basis of these trends to conclude that there has been a deterioration in soil fertility or in standard of cultivation.¹²

A separate study made for the purposes of evaluating the results of the Grow More Food Campaign during 1947-48 to 1950-51, on the basis of the results of crop cutting experiments also confirms the above conclusion. In wheat, the general level of yield has gone up. In rice, the adverse seasonal conditions have influenced the average yield to such an extent that the measures taken to increase the production were not reflected in the yields.

However, the chief limitation of the above statistical study on yield trends should be recognised. The question of decline in soil fertility or standard of cultivation has been ascertained only on the basis of statistics relating to the acreage under cultivation, eliminating the more important factors of variations in climate and soil types as well as application of water and manure, crop rotation, etc., that affect soil fertility. The statistical basis is therefore

¹² See V. G. Panse, "Trends in Areas and Yields of Principal Crops in India," *Agricultural Situation in India*, June 1952.

not very adequate for the inference drawn. These studies have been useful only in supporting the fact that soil in most of the areas have become stabilised at a very low level of fertility. The crop cutting experiments conducted by the ICAR conclusively prove that higher yield per acre could be achieved under various schemes of improved cultivation.

IRRIGATION AND WATER SUPPLY

The importance of the monsoon rains to India's agriculture and the main characteristics of the Indian rainfall have been already noted. Except in the two zones of heavy rainfall, the Indo-Gangetic plains and the narrow tract along the West Coast, any deficiency in rainfall causes harm both to land and cattle in the first year and if repeated, results in a famine. Irrigation, therefore, has a significant part to play in the shaping of the agricultural economy of the country.¹³ Taking into consideration all sources of water supply and types of utilisation,¹⁴ only 15·5 per cent of the total area under tillage is used while 84·5 per cent is left to depend on the monsoon. The irrigation works use about 7 million cubic feet of water, nearly 20 per cent of the annual surface flow. Of the rivers, the Great Punjab Rivers are drained dry by their canals. Roughly 53 per cent of the irrigated area is fed by canals, 11 per cent by tanks, 25 per cent by wells and 11 per cent by other sources.

A regional analysis of the proportion of the area irrigated to total area sown reveals the unsatisfactory situation in the various States in respect of irrigation facilities. The area under wells and other sources is capable of rapid expansion and fluctuates widely, being especially important in areas of deficit rain.

¹³ Irrigation of some sort has been practised in India from time immemorial. The Grand Anicut on Cauveri, a million cubic feet of masonry, was built in the eleventh century; but most of the canal development is the work of the last hundred years.

¹⁴ Among the types of utilisation, canals predominate. They fall into two groups (1) inundation canals, i.e., mere cuts parallel to the rivers in the flood plains and (2) perennial canals fed by elaborate head works with regulated flow. Many of the inundation canals date from the Moghul period, a few even earlier, but the perennial systems are the creation of the British Administration. The second type is that of tanks. The irrigation tanks, as distinguished from the small rectangular tanks in villages for domestic water supply, are often built up and are fed by rain water except in wet areas; in some States such as Bengal, they are obviously very likely to fail in the summer season. They are, therefore, on the whole, unsatisfactory. Thirdly, wells. Wells in the aggregate, are exceedingly important. Even in the Punjab where they are large and prominent, the average area is only 12 acres. Other types consist of small temporary tanks and channels (such as the *Ahars* and *Pynes* of South Bihar), the spring channels of the river beds in South India, mere water holes in flood plains, direct lift from rivers and so on.

SYSTEMS OF CROPPING

The types of cultivation in India may be broadly grouped into (1) shifting cultivation in hill tracts, (2) settled agriculture, growing food crops and cash crops, dry or irrigated, and gardening, (3) estate farming including plantations. On all the borders of Assam and in the wilder parts of Central India, the shifting cultivation is practised. Dry rice, buck wheat, maize, poor millets and tobacco or sugarcane of poor quality are grown on burnt-over clearings. In the Western Ghats and Sub-Himalayan slopes both shifting and settled cultivation practices are noticed. Estate farming is practically confined to the military dairy and vegetable farms, State farms and some factory estates for the growing of commercial crops such as sugarcane, cotton and oil seeds. There are only very few large estates run on Western lines and these too are often cultivated by tenants. The most notable example is that of the Gosaba Estate of Sir Daniel Hamilton, about 22,000 acres of reclaimed land in the Sunderbans. The plantations are almost entirely for tea, coffee and rubber. But such large estates have hardly a significant role in Indian agricultural progress. By far the most important is peasant farming.

The systems of cropping of the over-whelming majority of the small holdings are far from satisfactory. Excessive concentration on the growing of food crops, particularly cereals and a few cash crops such as cotton and sugarcane has lowered the farmer's standards of crop rotation which, in themselves, need improvement with the aid of research and experiment.¹⁵ In some areas, of course, oil seeds, sugarcane and fibres are nearly as important to the economy as are food crops and in some local regions, minor branches of activity are significant, *viz.*, market gardening, spices, sericulture, etc.

The farming practices of the Indian agriculturist are closely adjusted to nature and environment, *viz.*, precarious seasons, undeveloped and poor soil, and the burden of continuous use of fertile land. "In many places, the system of agriculture followed has attained a very high standard is a matter of common knowledge; the cultivation of rice in the deltas, for example, has reached a

¹⁵ Report of the Royal Commission on Agriculture in India, p. 107.

marked degree of perfection, and the wisdom of many agricultural proverbs stands unchallenged by research.”¹⁶ The characterisation of the Indian plough as that of merely scratching the soil may well be due to the lack of appreciation of the reasons why the Indian cultivator tenaciously adheres to the old models : (1) his bullocks can draw only light ploughs, (2) his preference for a plough, light enough to be carried on his shoulders from field to field in his scattered holdings. These are reasons sufficiently valid and important. Further, whether the cultivator has a conscious realisation or not, the importance of conserving moisture in the soil necessitates the use of light ploughs. It is significant that the Royal Commission on Agriculture in India admitted that “while deep ploughing is essential for some crops and soils, it has certainly not been established that it would pay the cultivator in all *Kharif* conditions. Indeed the contrary is more probable, as it might well lead to loss of moisture in areas of light rainfall, to the reverse in humid areas, in either case jeopardising germination.”¹⁷

The methods of cultivation vary widely in details from region to region and even from village to village. Among these methods the most important are those relating to rotation of crops and application of manures. Sowing practice also varies considerably. In the Punjab, Uttar Pradesh and Southern Madras, the crop is broadcast. Drilling which is only a recent introduction has spread rapidly. In the Uttar Pradesh, sugarcane which remains in the soil for atleast 9 to 12 months has altered the traditional pattern of crop rotation which included pea, arhar and fodder crops. In several areas of Bengal, jute has displaced the crops of pea, gram and oilseeds which help to keep up the fertility of the soil. In some parts of Gujerat, continuous raising of cotton crop is displacing the system of rotation and alternate cropping with the result that certain plant diseases and pests are appearing. Such departures from the system of alternative or sequential crops are reported to have intensified the evil of soil depletion.

In fertilisation of the crops, the value of farmyard manure has always been realised and actually supplied wherever available.

¹⁶ *Op. cit.*, p. 14.

¹⁷ See Report, pp. 110-112.

The use of fertilisers has recently become common but is conditioned by the financial resources of the farmer, the crops grown and the nature of the rainfall or water supply.

LACK OF GOOD SEEDS

The use of improved varieties of seed has extended to only 20 per cent of the area under cultivation inspite of the propaganda through Extension Services. Only in Punjab, the whole of the area under cultivation in respect of paddy, wheat, jowar, gram and bajra has been brought under improved varieties of seeds. In none of the other States, cultivation under improved seed covers more than 20 per cent of the area sown, except in Pepsu where the percentage for wheat is 30, while in Assam and Orissa the percentage is as low as 5. Even the little progress made in this direction has been confined to cash crops in most of the States. The supply of improved seeds for food crops increased in the war and post-war years when considerable stress was laid on their propagation as a part of the Grow More Food Campaign. The progress however has not been appreciable and "it may be that there is special difficulty in maintaining the purity of the seed of crops which are widely consumed as food."¹⁸

The comparative neglect of rice and millet is to be essentially noted in view of the prominence of these grains in the diet of the people. The question therefore requires further examination.

POOR LIVESTOCK AND OTHER EQUIPMENT

Through years of negligence and indiscriminate breeding, farm animals have become poor in quality and performance. The position is in no way better in respect of agricultural implements. In the major part of India the farmer uses a wooden plough which stirs rather than inverts the soil, the seed is merely broadcast and then ploughed into the earth. He cuts the harvest by hand, thrashes the grain under the bullock's heels and winnows cereals by the agency of the wind. The Royal Commission on Agriculture in India observed that "agricultural implements in India are, on the whole, well adapted to local conditions. They are within the capacity of the draught oxen, comparatively light and

¹⁸ Report on the First Five-Year Plan, p. 253.

portable, easily made and what is perhaps of even greater importance, is easily repaired and they are constructed of material which can be readily obtained. In spite of these advantages, there is undoubtedly very great scope for improvement in the light of modern knowledge of soil conditions." Since 1928, efforts have been made to replace these old models of implements with improved ones, but the progress is very slow. While the total number of ploughs in India is 32·7 million, hardly 7 or 8 thousand ploughs of better varieties are sold annually through the departmental agencies. The area of cultivated land in India farmed by power machinery is less than 1 per cent.¹⁹ The position regarding fodder cutters, cane crushers, winnowing machines and other implements is still very unsatisfactory, ploughs having been taken up more rapidly than any other implement. The sugarcane crushers numbered 541,000, oil engines 95,000, and electric pumps 30,000. During and since World War II, farmers have begun to use power driven machinery to a greater extent than before. The increased financial assistance under the GMF Campaign has accelerated the process, but considering the size of farming in India, the progress made hardly touches the fringe of the problem. The increase in the use of tractors in the country for agricultural purposes only may be judged from the following table showing the import of tractors.

NUMBER OF TRACTORS IMPORTED INTO INDIA*

• Year	No. of tractors imported
1949-50	.. 3,318
1950-51	.. 4,930
1951-52	.. 7,148

* The Report of the Grow More Food Enquiry Committee, Government of India, June 1952, p. 32.

19 Silver Jubilee Souvenir of the I. C. A. R., 1929-54, p. 119.

SIZE OF HOLDINGS²⁰

The average size of holdings in 1950-51 and the distribution of holdings are shown in Table 3. The average size is between 3 and 5 acres. According to the Agricultural Labour Enquiry, the average size of cultivated holdings for All India was 7.5 acres. The lowest was in Southern and Eastern Zones being in each case 4.5 acres. The numerical size does not give any indication of the relative importance of the holdings. In the Punjab and Pepsu, mainly wheat growing areas, average size was about 12 and 15 acres respectively. In some other States also, for example, Rajasthan, Madhya Pradesh and Hyderabad which are comparatively less fertile, mostly unirrigated and which grow millets, the average size was high at 16.9 acres, 13.9 acres and 14.1 acres in the respective areas. From the point of view of wage-paid employment, the variation in the size of individual holdings is of greater significance. The smaller the size of the farm, the more it depends on family labour and mutual help and less on hired labour.

From the results of the census of holdings carried out in 22 States,²¹—in 10 States²² on the method of complete enumeration of all holdings, in 7 States complete enumeration being restricted to holdings of 10 acres and above and in the others by sample survey—the nature of the size and distribution of holdings is indicated. In Andhra, out of a total of 2,645,000 holdings, 66.8% were less than 5 acres; 96.3% of the holdings were below 30 acres. But nearly 32.7% of the total area were concentrated in 3.7% of the holdings. In Bombay, out of 4,764,000 holdings, 51.3% were under 5 acres; 93.6% of the holdings were under 30 acres; and 36.6% of the area were comprised in 6.4% of the holdings. In Madhya Pradesh, out of 4,458,000 holdings, 59.4% were under 5 acres; 95.4% of the holdings were under 30 acres and 36.5% of the area were comprised in 4.4% of the holdings.

20 Consolidated statistics are not available to arrive at an accurate national estimate on the size of holdings. However, the Census Enumeration (1951) and the Agricultural Labour Enquiry (1950-51) contain data which provide the basis for the calculation of the average size of holdings in the different States of India. A more reliable basis may be available if the results of Census on Land Holdings in progress are completed for all the States and for all the size groups.

21 The data have been made available only for 20 States.

22 Andhra, Bombay, Madhya Pradesh, Madras, Hyderabad, Madhya Bharat, Saurashtra, Ajmer, Bhopal and Kutch (before the scheme of reorganised States came into force).

TABLE III
AVERAGE SIZE AND DISTRIBUTION OF HOLDINGS IN INDIA : 1950-51

Census Zones	Average size of cultivated holdings (acres)	Percentage Distribution of holdings by size groups (acres)														
		upto 1		1.1 to 2.5		2.6 to 50		5.1 to 10.0		10.1 to 25.0		25.1 to 50.0		Above 50		
		Num-ber	Area	Num-ber	Area	Num-ber	Area	Num-ber	Area	Num-ber	Area	Num-ber	Area	Num-ber	Area	
All India	..	7.5	16.8	1.0	21.3	4.6	21.0	9.9	19.1	17.6	16.2	32.5	4.2	19.0	1.4	15.4
North India	..	5.3	14.8	1.4	26.2	8.3	25.1	16.7	20.6	26.4	11.4	30.6	1.4	8.8	0.5	7.8
East India	..	4.5	21.4	2.1	24.4	9.1	26.4	20.8	18.4	27.6	8.0	25.1	1.0	7.4	0.4	7.9
South India	..	4.5	28.0	2.7	27.1	9.5	20.9	16.3	14.0	21.1	7.9	25.4	1.6	11.8	0.5	13.2
West India	..	12.3	11.2	0.5	15.6	2.1	13.9	4.1	20.4	11.9	25.4	32.6	10.1	28.6	3.4	20.2
Central India	..	12.2	7.4	0.3	12.3	1.5	16.4	4.5	22.1	12.0	28.4	33.7	9.6	24.1	3.8	23.9
North-West India	..	12.6	5.4	0.2	14.4	2.0	16.9	5.1	22.5	13.4	31.0	39.3	8.0	22.3	1.8	17.7

Source : Agricultural Labour—How They Work and Live, 1954, Government of India, pp. 54-55.

In Madras, out of 4,958,000 holdings, 67·6% were under 5 acres, 97·2% of the holdings were under 30 acres ; and 31·1% of the area were comprised in 2·8% of the holdings. In Hyderabad, out of 2,798,000 holdings, 32% were less than 5 acres, while 86·2% were under 30 acres ; 52·3% of the area were comprised in 13·8% of the holdings. In Madhya Bharat, out of 1,429,000, 45·6% were under 5 acres ; nearly 22·6% were between 5 and 10 acres ; and 32·6% of the area were comprised in 6·2% of the holdings. Saurashtra presents a picture in contrast. Only 9·9% of the 343,000 holdings were under 5 acres whereas 33·6% of the holdings were between 15 and 30 acres ; and 58·1% of the area were comprised in 29·7% of the holdings.

Distribution of Holdings

The inequality of distribution in land is indicated by the area of land comprised in different size groups. While concentration of cultivators and of the area in different size groups differs from State to State, mostly, cultivating holders in the size group above 30 acres forming a lesser percentage of the number of holdings cultivate a larger area than the majority of holders who have less than 5 acres. This fact is also confirmed by the Bench Mark Surveys conducted by the Programme Evaluation Organisation of the Planning Commission. In Bhadrak Block (Orissa), 62% of the cultivators in the size group below 5 acres cultivate 31% of the area. Cultivating holders between 5 and 10 acres number 26% and cultivate 32% of the cultivated area. The size group above 25 acres has only 1·3% of cultivators but an area of operation of 7·5%.

Another fact which throws light on the inequality of distribution is the ratio of land owned to cultivated land. Two broad features have been noticed in this connection. Firstly, in Bhadrak, in all cultivated holdings upto 10 acres including the size group below 1 acre, the owned land is less than the cultivated land indicating that these cultivators supplement their owned land and increase the unit of cultivation. From 10 acres onwards, land owned is more than the land cultivated and for all the size groups on the whole, the proportion of land owned by the cultivators is 93% of their cultivated land. The above position is also reflected in the area 'taken' on lease or usufructuary mortgage and 'given'

on lease or usufructuary mortgage; the area 'taken' is more than 'given' in the size groups below 1 to 5—10 acres, which leads to an increase in the area cultivated per cultivator than the area owned by him. The cultivators in these size groups who are 88% of the total have increased their cultivated holdings over their owned holdings by 25%. Secondly, in relation to the size of household, it is noted that most of the households with unit size have no cultivated holdings though some of them may own some land. Perhaps, the enterprise of cultivation is either not worth the trouble for a small household or not practicable to supervise, or not adequate to put forth the manual labour required for raising a crop. With the increase in the size of the household, the size group of holdings also correspondingly increases.

In Bhadrak, the cultivated area per member of household is more or less equal for the households with the size of 3 to 8. For households with 9 or more members, the area is slightly higher. In regard to cultivated area per earner, there is a gradual increase with rise in the household size. The maximum area cultivated per earner is 4.8 acres whereas for all sizes of households, the average area per earner is 2.7 acres. The area per earner is 5.5 acres for single member households in the group of 5 to 10 acres. This much area is reported to afford full employment for an earner's labour time, but only about 8% of the cultivating households and about 9% of the earners have their labour used to this extent.²³ In the Batala (Punjab) and Kolhapur (Bombay State) Projects, but for local variations, similar trends are noticed.²⁴

Sub-division and Fragmentation

In India the problem of sub-division of holdings and the fragmentation of the latter into minute fields has been widespread and has been engaging the attention of Governments for several years past. The Hindu and Mohammedan Laws of Inheritance were the primary cause for the increase in the number of sub-divisions with each succeeding generation. This process was accelerated by the progressively increasing population without a corresponding increase in the opportunities for employment in gainful occupa-

²³ Bench Mark Survey Report on Bhadrak Block (Orissa) P.E.O., Planning Commission, 1956.

²⁴ *Ibid.*, Batala (Punjab) and Kolhapur (Bombay State).

tions. Other contributing causes were : (i) the evolution of a code of juristic rights in the recent past which emphasised individual rights and ownership, (ii) the gradual breaking up of the joint family system and insistence on the partition of land by metes and bounds, (iii) the liability of the registered holder to pay the land revenue on the piece of land registered in his name, and (iv) acquisition of holdings by money-lenders in lieu of debt. The increasing fragmentation of the holdings of the individual was another disastrous result of the inheritance laws. Each heir tries to take a share in each of the separate block, so as to get a fair share of the fertile and unfertile lands in his inheritance. This twin process has been going on from a very long time. Almost all socio-economic enquiries and surveys carried out in the last forty years into the land holdings have tended to indicate the rapid pace at which the process of sub-division has been proceeding in the different States of the country.

In his non-official social and economic survey of a Konkan village, Shri V. G. Ranade recorded that of the culturable area of 192 acres in the village, 22 non-agriculturists owned 110 acres or an average of 4.71 acres while 28 agriculturists owned 78 acres or an average of 2.85 acres. Twelve out of the 52 holdings were below one acre. All these acquisitions were made by *Sahukars* from the old cultivating *ryots* in lieu of their indebtedness. The Royal Commission on Agriculture (1927-28) divided the problem into four categories : (1) the sub-division of holdings of right-holders, (2) sub-division of holdings of cultivators who may not be right-holders of the whole or part of the land they cultivate, (3) the fragmentation of the holdings of right-holders and (4) the fragmentation of the holdings of the cultivators. Mr. Keatinge has expressed the opinion that "the agricultural holdings of the Bombay Presidency have to a large extent been reduced to a condition in which effective cultivation is impossible." Dr. Mann had come to the same conclusion in his detailed enquiries of the villages of Pimpla Saudagar and Jategaon Badruk.²⁵ In the Punjab the number of holdings below 3 acres increased from 43.4 per cent of the total holdings in 1928 to 48.8 per cent in 1939. In Madras the *Pattas* paying Rs. 10 and less increased from 69.5 per cent to

²⁵ Land and Labour in a Deccan Village, The University of Bombay Economic Series, pp. 43-54.

76.5 per cent between 1925 and 1945.²⁶ In Bombay the average holdings shrunk from 40 acres in 1871 to 7 acres by 1914-15. In Hyderabad the average size of holdings decreased from 23 acres in 1880 to 14 acres in 1945-46. The results of a survey conducted by Mr. Nasir Ali in Dupalli village in 1939 showed that, whereas there were 151 *pottadars* in 1904, the number rose to 170 in 1937-38. Again the average holding of each occupant went down from 5.97 to 3.25 acres between 1904-05 and 1937-38. It was also revealed that 83 per cent of the holdings were below 5 acres.²⁷ The more recent surveys reveal that almost 60 per cent of the holdings in Orissa and 66 per cent in Uttar Pradesh were below 3 acres while in Madras almost 84 per cent of the holdings were below 5 acres. In the Punjab, almost 60 per cent of the holdings were below 5 acres while holdings below 15 acres constituted 88 per cent of the total number of holdings.²⁸ The results of the Agricultural Labour Enquiry conducted recently in certain villages in the State of Madras, Bihar and West Bengal showed that the largest percentage of holdings was below 2 acres.

In many parts of the country tiny holdings and miniature farms of 1/60 acres or 30½ sq. yds. are not uncommon. The Bengal Land Revenue Commission having surveyed the agricultural conditions in the province, came to the conclusion that the pressure of population on land was the chief cause of Bengal's economic troubles, "it is the most difficult problem we have to face because it is virtually impossible under present conditions to suggest any remedy for it." The Punjab Land Revenue Committee similarly observed that "consequently many of the small proprietors who have insufficient land for the maintenance of their families are compelled to cultivate land of the larger proprietors and pay them half the crop. In the same way, the occupancy ryot who has insufficient land cultivates, as a *Bargadar*, the surplus land of the non-cultivating or well-to-do ryot." It is estimated that a tenant in the Punjab who cultivates on the *Batai* system, *i.e.*, pays half the crop, would require 10 to 12 acres for the maintenance of an average-sized family. The length to which the division and sub-division of land have gone may be seen from the comparative position of the

²⁶ Report of the Famine Inquiry Commission, 1945, p. 256.

²⁷ See Report of the Agrarian Reforms Committee, Hyderabad, 1949, pp. 60-63.

²⁸ Consolidation of Holdings, Reserve Bank of India, 1951, p. 13.

average size of holdings in India and in some of the important parts of the world, as indicated in Table 4.

TABLE IV
AVERAGE SIZE OF HOLDINGS IN VARIOUS COUNTRIES

Country	Year	Average size of holdings (in acres)
U. S. A. 	1950	215.0
Australia 	1947-48	3,817.0
New Zealand 	1949	491.0
Belgium 	1950	4.5
Denmark 	1951	37.6
Finland 	1950	12.8
Germany (Federal Republic) . .	—	27.0
Norway 	1949	7.4
Sweden 	1944	22.1
Switzerland 	1939	11.6
United Kingdom 	1949	66.4
Italy 	1946	5.5
Yugoslavia 	1950	11.6
Japan 	1950	2.0
India* 	1950-51	7.5

Source : Compiled from the Progress in Land Reform, United Nations, 1954. See Tables 1-15, pp. 3-16.

* All India Agricultural Labour Enquiry (1950-51), Report on the Intensive Survey of Agricultural Labour, Volume I, Government of India, 1954, p. 16.

Several authorities like Dr. Mann, Keatinge, Malcolm Darling and Calvert who undertook special studies in various parts of the country reported with alarm the distress caused to agriculture through fragmentation. In a Punjab village, lands were divided into 1,898 fields averaging one-fifth of an acre and 2,890 holdings have each over three fields. In another village, 12,800 acres were

found to be scattered in 63,000 fields.²⁹ The average size of plot in some districts of Bihar was found to vary between 0·28 acre and 0·8 acre at the last Settlement. In the Chattisgarh division of Madhya Pradesh, it was common to find an average holding of 10 to 12 acres scattered all over the village in no less than 30 to 40 plots of lands.³⁰ In Bombay and Assam, on an average, every holding contained 3·3 to 4·5 plots. In Ajmer, the number of plots varied from 3·3 to 3·5. The State Governments reported to the Famine Commission in 1945 that "there is a tendency in all provinces to progressive fragmentation of holdings."

A survey by the Food and Agriculture Ministry of the Central Government indicated that about 150,000 landholders in India owned more than hundred acres.³¹ According to the Rural Credit Survey conducted by the Reserve Bank, a large cultivator cultivates 58 per cent of the total sown area.³² Within this group, the big cultivator operates on 30 per cent of the area. The medium cultivator, numerically two-fifths of the cultivators, has less than a third of the sown area under him. There is an even steeper descent when the small cultivator is reached. Though this group constitutes 30 per cent of the total number of cultivators, the sown area occupied by it is just a little more than one-tenth of the total area sown by all the cultivators. In terms of the average area sown, the small cultivator has about 3 acres, the medium cultivator has slightly more than twice and the large cultivator, more than five times that area. The area sown by the big cultivator is nearly nine times the area sown by the small cultivator.³³

The effects of sub-division are that with every diminution in the size of holdings, fixed costs bear larger proportion to the total value of the yield and render the holdings uneconomic. The fragmentation results in waste of time and labour as the farmer

29 Survey of Bairampur Village, The Board of Economic Enquiry, Punjab.

30 Manual of Instructions on Consolidation of Holdings in the Central Provinces, 1946.

31 *Vide Eastern Economist*, October 23, 1953.

32 In the design of the survey, the cultivators are classified into the large cultivators who form the first 30 per cent in the village, the medium cultivators who form the middle 40 per cent and the small cultivators who form the last 30 per cent. Besides the big cultivator who represents the top 10 per cent included in the first group, subject to variations for different States, certain all India averages have been compiled on the basis of the data collected by the survey.

33 All India Rural Credit Survey, The General Report, Volume II, p. 22.

and his cattle have to move from one piece of land to another at scattered distances. Such under-sized scattered holdings mean low productivity, waste and debt. They have also impeded production, prevented agricultural improvement and in many areas are responsible for increase in the area under fallows. The problem of reconstitution of holdings is thus one of the most important in any scheme of agricultural reform.

AGRICULTURAL FINANCE

The types of agricultural credit are often classified on the basis of the status of the borrower himself and the periods for which credit is required. Apart from this, for further clarification, credit is also classified purpose-wise, security-wise and creditor-wise. The term or period of the loan is the most common means of describing it. In a sense the period-wise division into short-term, medium-term and long-term, is a general classification of which the other three, namely, purpose, security and creditor may be regarded as sub-divisions within each group.

(i) The short-term or seasonal credit is borrowed by the farmers for working capital which they require for production purposes such as purchasing seeds and fertilisers, paying wages and meeting other casual expenses, *viz.*, payment of rent, interest on debt, land revenue, etc. The loan may be either on personal security or with land as collateral. The agency may be either a money-lender or a co-operative society or any other institutional organisation. This type of loan is generally repayable out of the proceeds of the next harvest.

(ii) Medium-term credit provides the farmers with the means required to purchase livestock, expensive implements and to carry out land improvements of average duration (which include production purposes such as sinking wells, etc.). On the consumption side, they are also borrowed for purposes such as marriages, funerals, etc. This loan is repayable in instalments spread to 2 to 5 years. Such loans in many areas are borrowed from the money-lenders rather than the institutional organisations.

(iii) Long-term credit which gives farmers the means to purchase land and agricultural machinery or to effect permanent

improvement on lands such as drainage and irrigation, is repayable in small amounts over a substantially long period of 25 to 30 years or more. The Rural Credit Survey has defined short-term loans as loans whose repayment does not exceed 15 months, medium-term loans as those which are far longer than 15 months but are repayable in 5 years or less and long-term loans as all other loans which exceed these periods.³⁴

The main element in the problem of rural credit as a whole in India may be described as co-ordination. On the one side, there are the different types of borrowers, on the other, there are the different agencies of credit. Besides, there are the periods and purposes of credit. What is required is a co-ordination of need and purpose with period, co-ordination between the agencies themselves, and co-ordination of the system as a whole with the objectives of Government credit policy.³⁵ In India, the banking and other institutional organisations have not covered the rural financial system as they have done in the West. The private credit agencies taken together (excluding commercial banks but including professional money-lenders, agricultural money-lenders, relatives, traders and landlords) supplied about 93 per cent of the total amount borrowed by cultivators. The part played by the commercial banks in agricultural finance is confined only to bigger landlords who possess tangible marketable securities, and is therefore insignificant and forms 0.9 per cent. The co-operative movement has also covered a small ground and has not gone into the heart of the village. It contributes 3.1 per cent. The State has restricted its system of loans more or less to emergency aid and only during the war period it was extended for some development purposes under the Grow More Food Campaign. It contributed about 3.3 per cent. The estimated percentages of contribution by the different agencies according to the period is indicated in Table 5. The money-lender thus remains still the main prop in which the structure of rural finance rests. The professional

³⁴ In the co-operative organisation, short-term loans are frequently made for 12 months on the implied understanding that they will be renewed thereafter. The renewal seems to be quite frequent in practice and the loans are sometimes carried forward indefinitely from year to year. Long-term loans of the co-operatives usually range from 15 to 20 years.

³⁵ See All India Rural Credit Survey, Vol. II, Reserve Bank of India, 1954, p. 155.

money-lender dominates the scene with 45 per cent of contribution and the agriculturist money-lender with 25 per cent of the total.

TABLE V
CONTRIBUTION BY CREDIT AGENCIES IN INDIA · 1954

Purpose-Duration	Amount borrowed from this agency as percentages of the total borrowings from all agencies						
	Gov-ern-ment	Co-opera-tives	Agricul-turist money-lenders and Land-lords	Profes-sional money-lenders, and Traders and Commis-sion Agents	Others (Com-mercial Banks, Relatives and others)	Total	
<i>Agricultural</i>							
Short-term .. .	2.8	11.3	36.2	35.2	14.5	100.0	
Long-term	6.0	2.4	41.5	31.9	18.2	100.0	
<i>Non-Agricultural</i>							
Short-term	—	0.5	26.9	38.6	34.0	100.0	
Long-term . . .	0.6	—	6.2	85.8	7.4	100.0	
<i>Consumption</i>							
Short-term	2.1	2.2	32.7	43.5	19.5	100.0	
Long-term . . .	1.0	0.9	38.7	37.2	22.2	100.0	
<i>Repayment of old debts</i> . .	0.8	8.7	52.3	23.2	15.0	100.0	
<i>Other Purposes</i> .. .	0.8	2.4	25.0	59.9	11.9	100.0	

Source : All India Rural Credit Survey, Volume II, General Report, p. 168.

While thus the combined contribution of Government and the co-operatives is small, being about 14 per cent of the entire borrowing for short-term agricultural purposes and 8 per cent for long-term (including medium-term) agricultural purposes, Government and co-operatives play a greater part in financing production. Long-term agricultural loans by Government account for 6 per cent of the total borrowings of this type as compared with 1 per cent from Government for long-term loans for consumption purposes. Co-operative loans, on the other hand, are relatively

significant for short-term agricultural production credit, constituting 11 per cent of the total short-term agricultural borrowing as compared with only 2 per cent for short-term co-operative credit for consumption purposes; but for the larger part of the requirements for consumption, the borrower has to turn to the private credit agencies.

Among the private agencies, the relatives who advanced loans free of interest constituted only 14.2 per cent, though they are of special importance in certain districts. The landlords contributed 2 per cent while the agriculturist money-lenders who were also cultivators, contributed 25 per cent. The rural credit enquiry has revealed that roughly 68 per cent of the village money-lenders were also cultivators while about 10 per cent reported as non-cultivating landlords. On this basis it has been assumed that approximately one-fourth of the total available credit was found internally by the agriculturist classes themselves, but it was mainly the large cultivators who were in a position to lend. In roughly one out of six districts, more than 90 per cent of the total dues were reported to be owed to the group classed as large cultivators. In 58 out of the 75 selected districts, more than 60 per cent of the dues were reported to be owed to that group.

The distinctive characteristics of the credit supplied by the agriculturist money-lender and the professional money-lender noticed by the Central Banking Enquiry Committee still persist. The Committee observed in 1931 that "the Bombay Committee report that the agriculturist money-lender is often more exacting than the professional money-lender" The Punjab Committee report that there is no great difference between the methods of the agriculturist money-lender and those of the professional money-lender, though his rates are probably lower. He is said to be avaricious and exacting and being to some extent in a stronger position than the professional money-lender, he recovers a larger proportion of his dues. His main, and sometimes his sole object is, to get possession of the land of his debtors. The U.P. Committee also report that the methods of the agriculturist money-lender may not differ materially from those of the professional money-lender in such matters as security, the renewal of bonds, the rates and calculation of interest, but they necessarily regard their

operations in a somewhat different light. Money-lending to them is not always a mere investment; it often has an ulterior motive."³⁶

The Rural Credit Survey has revealed certain points of difference, though minor, between the types of money-lenders which relate to landed security. In Assam, West Bengal, Eastern Coastal area, Bihar and Uttar Pradesh, a larger proportion of the debt owed to the agriculturist money-lenders was against the security of immovable property; bullion and ornaments are not a usual form of security for either, in most regions, but the debt owed to the professional money-lender against this type of security, is in a number of areas a larger proportion to the total than that owed to the agriculturist money-lender. The most note-worthy aspect common to both is that about four-fifths of the debt owed by either class is unsecured.

The position is that among creditors, the money-lenders, and among money-lenders, the professional money-lender dominates the rural credit. But it is the very indispensability of the money-lender, coupled with the inevitability of debt of the small farmers that has vitiated the system of money-lending. The dominance itself has been made possible by the ineffectiveness of all the attempts hitherto made to organise a competitive agency for the supply of credit for the rural areas. The money-lender has been, not unoften, lending too liberally to the farmer with a view to increasing his investment in this highly remunerative business; especially, an agriculturist money-lender lends money with an eye on the debtor's lands. In the past and possibly, even now, in some areas he has even gone to the length of keeping the debtors in serfdom as evidenced by the *Kamiuti* system of economic servitude in Bihar and Orissa and the *Pannayal* system in Madras, where even the law has failed to redeem the farmers. In fact, money-lending has become such a flourishing profession that even in Punjab where the co-operative movement is reported to have made the greatest advance, rural money-lending still ranks second in its yield of income tax and super-tax. If salary earners are excluded, one out of every four tax-payer is rural money-lender. Among other things, it is the adaptability of the money-lender to the needs of the agriculturist-borrowers which explains his survival in the village, in

³⁶ Indian Central Banking Enquiry Committee, 1931, Majority Report, pp. 75-76

spite of legislation, which is sought to control him. He actually possesses a local knowledge of the character and repaying capacity of the borrower. Secondly, he has also different kinds and degrees of hold on the debtor with whom he has to deal. This advantage, in most cases helps him to dispense with the need for taking any collateral security. The social and economic control which money-lenders possess over the agriculturist-borrowers in the village, under the code of mutual obligation, is sufficient guarantee for the repayment of money, as he does not invoke the forces of compulsion. The moment payment has become due, he gives sufficient opportunities for the borrower to make up for his seasonal deficiencies. The technique which he adopts and the realities of the village economic and social set up in which the technique operates and the fact that the money-lender is the virtual monopolist of rural credit, offer safeguards both for the borrower and the money-lender. Commenting on the advantage of the private money-lending system in Burdwan, West Bengal, it is observed, "the advantages of the private agency are its ready availability to the clientele and his (money-lender's) personal knowledge of the borrowers." In Hazaribagh, Bihar, the private money-lenders have been popular because (1) they are easily approachable, (2) borrowers have not to undergo any red-tapism and (3) they have not to spend anything for obtaining loans. The official experience in Punjab also was that the main advantages of these agencies are (1) the confidential character of the dealings and (2) the immediate availability of funds. These were confirmed by views from Sirohi (Rajasthan) and Poona. In almost all the States the elasticity of the operations of the money-lender is the main explanation for his survival and dominance of the money-lender's credit. It emerges very prominently from the Rural Credit Survey that the professional money-lender is one of the very few creditors who lends largely on personal security, as distinct from the security of immovable property.

The proportion of total debt that was secured against the moveable property to the total debt owed was only 15 per cent for professional money-lenders as against 64 per cent and 59 per cent for Government and Co-operatives respectively. It is with regard to the rate of interest that no restraint has been noticed on the part of the money-lender either professional, agriculturist or trader.

The proportion to total borrowings of cultivators from private credit agencies of such of those borrowings as bear a rate of interest of 25 per cent or more is as high as 70 per cent in Orissa, 49 per cent in Tripura, 40 per cent in West Bengal and Himachal Pradesh, 29 per cent in Uttar Pradesh and 27 per cent in Bihar. It is not infrequent that rates of 50 per cent or above were charged in certain areas. Borrowing at this high level of interest accounted for as much as 64 per cent in Jhabna, 30 per cent in Tripura, 27 per cent in Malda, 13 per cent in Hazaribagh, 10 per cent in Koraput and 9 per cent in Nainital.

Among the questionable practices prevalent among money-lenders are the demand for advance interest, demand for a present for doing business, and taking of thumb impression on a blank paper with a view to inserting an arbitrary amount at a later date if the debtor becomes irregular in payment of interest.³⁷ Generally, manipulation of the account, insertion in written documents of a sum considerably in excess of the actual amount of loan and taking of additional sale deed in order to provide against possible evasion of payment by the debtor are some of the other objectionable practices. The Agricultural Finance Sub-Committee observed that "while it is true that the money-lender is the most important constituent of the agricultural credit machinery of the country, it is not possible to justify many of his practices and the charges he makes for his services. Very often these charges are out of all proportion to the risk involved in the business and constituted an exploitation of the helplessness, ignorance and the necessity of the borrower. Nor is the agricultural economy of the country in a position to bear the strain of his extortion. The credit dispensed by him, instead of contributing to the agricultural prosperity of the country, serves as a serious drag on it."³⁸

No statistical reply is possible to the question whether the position has improved in the different parts of India on the introduction of legislation to regulate money-lending.³⁹ From a cross-section of the replies received by the Rural Credit Survey Committee, the

³⁷ Cf. Indian Central Banking Enquiry Committee, 1931; The Agricultural Finance Sub-Committee, 1945; the Rural Credit Survey, 1954.

³⁸ See Report of the Agricultural Finance Sub-Committee, 1945, p. 59.

³⁹ Rural Credit Survey, 1954.

position does not appear to have improved. In Jaipur the law is circumvented by taking a promissory note for a sum greater than that actually advanced. In Ahmedabad, some money-lenders evade the law by writing a debt of a higher order than the amount paid. In Bihar in order to safeguard the high rate of interest settled privately with the borrower, money-lenders get the bonds executed for a higher amount, 25 to 50 per cent than the actual amount paid. In Orissa the Money Lenders' Act is evaded by the creditors usually by getting credit-note executed for 50 to 100 per cent more than the actual loan. In Poona the practices outside the law are : (1) making agreements of the sale of land or any other property for the money advanced on loan, (2) executing promissory notes without interest and execution of deposit receipt in the place of promissory note. The version of a commercial bank in Bihar was that money-lenders defeat the provisions by acting within the Act and also evade the Act. Documents for advances were being actually registered where the rate of interest mentioned is much above the maximum allowable under the Act, confident as these money-lenders are that these debtors will have little courage to proceed against the *Mahajan* in a court of law. In West Bengal the business of private money-lending is done largely on personal credit and usury is practised under cover. Only about 10 per cent of the money-lenders are licensed. The system of obtaining and repaying loans in kind has also been substituted. The interest charge on loan varies from 30 to 60 per cent. Similar has been the experience of the officials of the Co-operative Department in Bombay, West Bengal and Orissa. On the whole, the impression gained is that while the legislation for the control of money-lending has restricted the credit available to the agriculturist-borrowers, it does not help to check the questionable practices that have been previously noticed.

■

GROWTH OF DEBT

The organisation of the rural economy on the basis of personal and traditional ties provided a significant and useful place to the money-lender in the past and he rendered an indispensable and valuable service to the rural population. The system also worked well. With the increasing adoption of the cash nexus and the introduction of British system of jurisprudence which laid down

rigid laws of property and contract, the humane basis of the creditor-debtor relationship in the village was destroyed. Consequently, new opportunities of exploitation were opened up for the money-lender. The agriculturist, always a man of small means, became dependent on market prices determined by forces he could not either comprehend or control. Whereas, formerly his requirements of cash were confined to a few occasions, now they recurred very often for the purchase of seed, payment of land revenues, etc. Thus, several causes have led to a rapid increase in the farmer's debt during the last seven decades and the malpractices of the money-lender have multiplied. Among these causes may be mentioned the increasing pressure on land resulting from the growth of population and the decay of cottage industries which led to a general enhancement in land rent and lowered the income of the tenant-farmers. The heavy assessment of the 'sixties also played its part in adding to the burdens of the cultivators and though reduced in later years, it could not bring much relief owing to the insistence on regular cash payments at certain fixed dates irrespective of the state of the market.⁴⁰ A series of famines in the last quarter of the 19th century further ruined the cultivators through failure of crops and heavy loss of cattle. The breaking up of the village economy and the consequent disappearance of village solidarity placed the money-lender in an advantageous position and he was free to be extortionate in exacting repayment. The inelastic and impersonal law was enforced with a sternness hitherto unknown to the peasant in India.⁴¹ The rule of *Damdapat* which prohibited him from receiving a sum double the sum lent became extinct. The new laws of Indian Contract Act and Civil Procedure Code were also in favour of the money-lender and enabled him not only to secure his exorbitant claims but attach the debtor's cattle and implements and even to arrest and imprison him. The Registration of Documents Act (1864) and the Transfer of Property Act (1882) enabled claims to be systematically recorded and led to the

40 See Thompson and Garraat, *Rise and Fulfilment of British Rule in India*, pp. 487-88.

41 Captain Wise in a report on Khandesh Bhils in 1874 admits, "Before the country came under us no *Saukar*, *Guzar*, etc., etc., could have dared to treat the Bhil as they now do, but these people take advantage of their rule to oppress and make slaves of those they formerly feared."

See Report of the Agrarian Reforms Committee, 1945, p. 85; also Report of the Peasant Enquiry Committee, Maharashtra P. C. C., 1936, p. 61.

growth of mortgages in number and value. Any appeal to the law by the farmer was therefore sure to lead to his own destruction. In the words of Sir Malcolm Darling "by 1880 the unequal fight between the peasant and the money-lender has ended in a crushing victory for the latter." For the next 30 years the money-lender was at his zenith and multiplied and prospered exceedingly to such good effect that the number of bankers and money-lenders and their dependents increased from 53,263 in 1868 to 1,93,890 in 1911.⁴²

SIZE OF DEBT

The size of debt has grown with the progressive deterioration in the economic status of the agricultural population. In 1930, the general consensus of opinion was that the volume of debt increased in the course of the last century.⁴³ Table 6 gives the debt position during successive periods as estimated by the different authorities.

TABLE VI
RURAL INDEBTEDNESS IN INDIA

Period	Amount of total rural debt of British India (Rupees in crores)	Authority
1911 . .	300	Sir Edward M'Clagan
1924 . .	600	Sir M. L. Darling
1930 . .	900	Indian Central Banking Enquiry Committee
1935	1,200	Dr. R. Mukerjee
1938	1,800	Mr. E. V. S. Maniam*

* "Essentials of Rural Development", Paper submitted to the 13th session of the World Co-operator's Conference, 1938, p. 23.

⁴² See Malcolm Darling in his evidence before the Royal Commission on Agriculture, Volume 8, p. 182.

⁴³ Report of the Indian Central Banking Enquiry Committee, p. 55. The Committee was the first to make a systematic attempt on an all India basis to ascertain dimension of agricultural indebtedness in the country.

The information given in the Provincial Banking Enquiry Committee Reports for 1930 and the results of the Rural Credit Survey 1954, indicate that there has been a persistent regional pattern in the levels of debt. The three States of Bengal, Assam and Orissa hold the lowest position in the burden of debt per family in all these years and on the other extreme, the States of Punjab and Bombay are seen to be continuously high debt States. Between the two enquiries, Madras which occupied a position somewhere in the middle in the order of arrangements of States, has moved up to the first place in the rank of debt per family. The increase in debt in Madras is definitely of greater significance than has been the case in any of the other States. A much milder change in position, but a distinguished increase in debt is revealed also in Uttar Pradesh. In Travancore-Cochin, the opposite trend has been noticed. Comparing the actual figures of debt per family revealed by the two surveys, the variations in money terms have not been large. In Punjab, Bombay, Bihar and Madhya Pradesh, there have been decreases in the average debt per family. For Orissa, Uttar Pradesh and Madras there have been increases.

Comparing the debts on the basis of the index of prices available for both the periods which stood at 141 in 1929 and 511 in 1951, the real burden of debt would appear to have grown distinctly less. The reasons should be found in the economic indicators of the two decades after the Provincial Banking Enquiry Committee's Report. The period may be broadly divided into (i) that of the depression until the beginning of World War II, (ii) the war period and (iii) the post-war period. The depression period was characterised by the enactment in a large number of States of debt relief legislations. The data on the working of the various Acts until the beginning of World War II reveal that in none of the States did they succeed in making any noticeable impression on the general level of indebtedness. The general dynamics of the debt situation during 1931-39 was the inability of the cultivator to repay the principal amounts of old debts in most cases and the default even in the repayment of interest charges to a certain extent ; there was no scope for the addition of fresh debt. The level of debt obtaining in this period was therefore a function of accumulated interest on the one hand and forced liquidation of debts by sales and foreclosures on the other. As a result of the working

of the various forces, some expansion in the monetary burden in agricultural debt has been recorded. A comparison of the position on the estimate made by the Provincial Banking Enquiry Committee and Dr. B. V. Narayanaswami Naidu for the year 1939 confirms the view that there was an increase in debt between the two periods.

During the war period, indebtedness generally declined, though, according to the three enquiries, one in Bombay, the other in Madras and the third in Mysore, which assessed the effect of war on indebtedness of agriculturists, the war-time rise in prices benefited mainly the substantial cultivators. The declining number of sales and foreclosures, repayments to co-operative societies and land mortgage banks, large number of redemption of old mortgages also showed that in most States, rural indebtedness diminished upto 1943-44.⁴⁴

The trend in indebtedness in the post-war period to-date cannot easily be assessed for want of appropriate data. There have, however, been a few enquiries into indebtedness in the post-war period in West Bengal, Bombay and Karnatak regions. In Ratnagiri District, Bombay, the number of indebted families increased by 15 per cent at the end of 1948 and the debt per family increased by 16.7 per cent. In Bengal, the percentage of families indebted rose from 31.4 in 1943 to 60 in 1946, while the debt per family rose from Rs. 87.6 to 158. In 14 villages of U. P. while there was a decrease in the number of indebted families and the total amount of debt in 1949 in comparison with 1939, the average debt per family increased in all the groups of landholders. The *per capita* debt rose from Rs. 93 in

44 The Mysore Enquiry pointed out that while the smaller cultivator may have been adversely affected in particular areas, the general indication is that there was not marked increase in money burden, of increase even on smaller cultivators. If at all, the real burden of past debt was reduced to a great extent as a result of the changed value of money. Evidence contained in the data of the Rural Credit Survey also points out that for all classes of cultivators, debt accounts appeared to have become active accounts instead of immobile burdens. See Report of the All India Rural Credit Survey, Summary of Volume I, p. 42.

There is also a section of opinion which holds that a rise in trend in indebtedness was evident after 1951. When agricultural prices were kept in check by price control, procurement measures, etc., the level of cost mostly shot up with the increase in prices of agricultural produce and in some instances had even passed it. The margin of profit which had during the period of 1941-44 led to the liquidation of old debt had distinctly shrunk. See Report of the Agricultural Finance Sub-Committee, 1945, p. 758.

1939 to Rs. 143 in 1949, in the case of landlords owning less than 2 acres. In the Karnatak and Deccan regions in the Bombay State, fresh advances by the agricultural credit societies went up in 1947-48 to nearly 21 per cent over the pre-partition figures. The Rural Credit Survey records a higher level of debt than all the previous enquiries. This is explained by the fact that while the burden of past debt materially lessened by about 1945-46, debts were again contracted at higher levels in the later years.

An analysis of the data of the duration of debt provided by the Rural Credit Survey indicates that with the exception of Punjab-Pepsu region, in which alone the duration of outstanding debt to the extent of more than 10 per cent was of more than 10 years, the proportion of debt of such long duration was small in all other regions. The distribution of the burden of long standing debts has been fairly even among cultivators of both the upper and lower strata.

As for the variations in the size of borrowings in the several States in the pre-war period, the debts were more widespread in those States in which the peasant proprietor was more common than the tenant. According to the Punjab Land Revenue Committee, the proprietors' debt in that province averaged Rs. 600 as against Rs. 150-160 of that of the tenant. Better security was also a factor which facilitated borrowing; thus in Madras where land values were higher than in Bengal, indebtedness per head of the agricultural population was Rs. 46 as against Rs. 32 in the latter.⁴⁵

Data on the level of outstanding debt during 1951-1952 are available in the Rural Credit Survey. This level is the joint result of two factors, the level of debt per indebted family and the proportion of indebted families to the total number of families. According to the Rural Credit Survey, the level of the outstanding debt per family varied from Rs. 100 to Rs. 500, and the incidence of indebtedness was higher among the cultivating than the non-cultivating class despite the fact that the latter was the worse off economically.⁴⁶ Over 70 per cent of the cultivators were indebted

⁴⁵ Report of the Bengal Land Revenue Commission, Vol. I, p. 90.

⁴⁶ These figures exclude loan transactions in kind which, according to the Survey, were not of a considerable magnitude.

in *all* districts whereas in several districts, some 70 per cent of the non-cultivators were free from debt. Among the cultivating families themselves the incidence of indebtedness is higher among the larger cultivators though the incidence calculated per acre on the basis of the size of the holding is smaller for the larger cultivators, *i.e.*, the burden of debt per acre decreases as the number of acres cultivated by a family increases. Furthermore, the debt outstanding for a period of five to ten years was proportionately more for the smaller farmers.

As regards the debt-assets ratio, in general the outstanding debt was less than 10 per cent of the value of the total assets of the cultivator, although the ratio was far more unfavourable for the smaller cultivator.

AGRICULTURAL MARKETING AND TRANSPORT

The unfavourable conditions in which the Indian agriculturist has to market his produce and the exploitation by the village money-lender through control over the produce of the cultivator are well-known. As broad general percentages, about 35 per cent of the total production is sold by the cultivator, a large part of it to traders and commission agents, 15 per cent disposed of in kind as wages or rent, and nearly 8 per cent utilised as seed. The preponderance of sales is within the village itself as distinct from the sales at the market town. According to the Rural Credit Survey, in very nearly two-thirds of the sale transactions, the commodity was delivered in the village itself. In the absence of storage facilities or of orderly marketing arrangements, it is to the trader or to the money-lender that the cultivator has, for the most part, to resort for marketing his produce. The various private financiers who advance loans insist that the produce will be sold to or through them.⁴⁷ Being pressed by the money-lender on the one

47 "When the primary collector who acts also as a money-lender, succeeds in getting a cultivator into his grip, he is apt to use his advantages ruthlessly Certain practices that obtain in the markets proper amount to nothing less than common theft. . . ." Royal Commission on Agriculture in India, p. 384.

Subsequently, the National Planning Committee on Rural Marketing and Finance (1947) observed: "Twelve years have passed since the Report and some legislative steps were taken to improve the position. On the whole, however, the picture drawn at the time of the Royal Commission on Agriculture, faithfully reflects the state of affairs in Indian markets even today." National Planning Committee on Rural Marketing and Finance, p. 44.

hand and the rent collector or the tax collector on the other, the cultivator sells his produce in the first available market. The unregulated marketing conditions and the lack of finance for storing the crop for a better price have encouraged a long chain of dealers and middlemen to make the most of this glut in the markets soon after the harvest. According to the Report of the Marketing of Wheat in India (1941), out of a rupee paid by the consumer, only 8·14 annas go to the real producer. The farmer's share is still less in the marketing of other commodities. It is possible that the share of the farmer has increased in recent years.

Inadequate transport facilities also lead to variations in prices of the same commodities at different centres even in the case of organised markets. The prevalence of a variety of local regional weights and measures leads to confusion, often to the detriment of the cultivator. State Governments have introduced legislation for the adoption of a uniform standard of weights and measures, but the implementation of the measures already enacted is not always effective.

The development of co-operative marketing has been slow. The main obstacles to progress have been lack of storage facilities, ignorance about market conditions and trends, want of ability to manage business and inadequate finance. The success of co-operative marketing is thus confined to a few areas. Though the cost of finance provided by the co-operative organisation is generally one-fourth to one-half of that from money-lenders, the latter still have a large hold on the cultivator. The rate of interest charged by the co-operatives varies from 6 to 12 per cent whereas the money-lenders charge anything from $12\frac{1}{2}$ to $37\frac{1}{2}$ per cent. The development of co-operative marketing is, therefore, conditioned by the provision of cheap and timely credit ; but the success of the movement is also dependent on the proper regulation of markets and the provision of licensed warehouses for the storage of agricultural produce. Promising developments have, however, taken place in the marketing of sugarcane in U.P. and Bihar and of cotton in Bombay and Madras. The scheme of controlled credit which has been in operation in Madras since 1936-37 has also worked well. Under the scheme, loans are given to mem-

bers at three stages (i) for cultivation expenses on the undertaking to sell the produce through a village loan and sale society, (ii) for payment of land revenue and other urgent purposes on the security of standing crops and (iii) for the purpose of holding up the produce for a better market on the pledge of produce. The loans are controlled at every stage to assure that they are utilised for the purposes for which they are sanctioned. Table 7 shows the position of the co-operative marketing societies (the production, sale and purchasing societies and the purchase and sale societies combined) in India.

TABLE VII
POSITION OF THE CO-OPERATIVE AGRICULTURAL MARKETING
SOCIETIES IN INDIA : 1955-56

	No. of Societies	No. of members (thousands)	Working capital (Rs. '000)	Sale of goods to members (Rs. '000)	Value of members' produce purchased (Rs. '000)	Cost of manage- ment (Rs. '000)
Part 'A' States..	26,142	19,36	24,46,36	29,32,17	29,54,70	1,27,13
Part 'B', 'C' and 'D' States ..	4,126	456	3,94,53	1,84,03	1,71,25	12,11
Total ..	30,268	23,92	28,40,89	31,16,20	31,25,95	1,39,24

Statistical Statements relating to the Co-operative Movement in India, 1955-56,
Reserve Bank of India, pp. 58-61.

Taking all the agricultural trading societies together, the value of total produce handled by them was Rs. 31.16 crores. Of this, nearly Rs. 4.47 crore was in respect of sugarcane societies in the Uttar Pradesh and Bihar and nearly Rs. 4.38 crores was in respect of cotton sale societies in Bombay (1953-54). The sale movement has yet to spread itself in other commodities also. The movement has made only a limited advance in such States as Delhi, Ajmer, Madhya Bharat, Pepsu, Orissa and Kashmir.

There is a paucity of good roads in rural India. The means of transport of agricultural produce from village to market is

largely, of course, the bullock cart, except for ponies used in mountainous regions or camels in Rajasthan. Mechanised transport is still a far cry for many villages. The position of existing roads is far from satisfactory and there are thousands of villages which are not yet connected with major roads or the railway.

LAND TENURES

There were, prior to recent reforms, two main forms of land tenure in India: the *Zamindari* and the *Ryotwari*, the former prevailing chiefly in Bengal, Bihar, parts of U.P., Orissa, Assam and parts of Madras, and the latter in South India and Western India. The Zamindari form of tenure had its origin in the attempts of the British to create a class similar to that of the landlords in England by conferring rights of ownership in the land upon the Zamindar and making him solely responsible for the land revenue. The Zamindar was usually a former tax farmer or revenue collector, and though originally the rights of the actual cultivators, *i.e.*, to security of tenure, were sought to be recorded and safeguarded, in course of time the Zamindar came to have complete rights of ownership, including the right to terminate the tenancy of the cultivators. In Bengal and some other areas, the land revenue due to the State was fixed in perpetuity under the Permanent Settlement, but later on, when other areas in India were brought under Zamindari, a temporary settlement was adopted under which the tax demand of the Government could be periodically revised.

Under the Ryotwari type of tenure first introduced in the Baramahal districts of Madras in 1792 and later extended to other provinces, the cultivator of the land originally held it directly from the State and the assessed revenue was payable by him to the State and not to an intermediary, as in the Zamindari system. Ryotwari holdings are principally located in Bombay and Madras. The settlement is fixed for a period ranging from 20 to 40 years, but is generally for 30 years, after which it may be revised. In due course, the ryot or settlement holder, even in this type of tenure, did not necessarily cultivate the land himself; subletting became increasingly widespread, leading to a great similarity between

Ryotwari and temporarily settled Zamindari tenures, where the absentee landlord was a characteristic phenomenon.

Apart from these two types of tenures, there were a variety of tenures, of which the most important were the *Mahalwari* or *Malguzari* and the *Jagirdari* or *Inamdari* systems. The Mahalwari system prevailed chiefly in Punjab, parts of Madhya Pradesh, U.P. and Pepsu. Under this system of land holdings, the village estates were held by co-sharing bodies or village communities, the members being jointly and severally responsible for payment of land revenue, though a co-sharer of standing was generally selected to undertake the primary liability of paying the land revenue. The State demand varied from 40 to 70 per cent of the rentals. The details regarding procedure, period of settlement and assessment of land revenue varied from place to place.

Under the Jagirdari or Inamdari tenure, the *jagirdar* or *inamdar* was originally granted the rights to all or a certain portion of the land revenue, in recognition of services rendered to the State; the *jagirdar* had no rights of occupancy or property in the land, though the right to the collection of the revenue was itself saleable. Here, again, the *jagirdar* or *inamdar* sometimes usurped the rights of the actual cultivator, and became, in fact, a landlord.

In India changes in the methods of land holdings did not proceed altogether on lines similar to those in the West. The disappearance of primitive tribal tenure is shrouded in the dim past, but the system at no time shaped itself into a feudal type of tenure which prevailed in Europe. During the period when the cultivators had lost their rights and lived under a system of servile tenure in Europe, the organisation of strong and virile village communities in India protected the rights of the cultivator and regulated them in the interests of the community. In some communities, land was a common possession of all. In others, it was owned by individual families but the institution of the village bound the people together into a fraternal organisation for the purpose of government and regulation of their social and economic relationships. The king was entitled only to a share of the produce raised from the land. In the later Hindu and greater part of the Moghul period, this right was never conceived of as absolute, exclusive ownership of land itself. The ancient theory was that land was

not the king's exclusive property, but was common to all beings working with their labour on it. The Moghul system was essentially a Ryotwari system which went straight to the cultivator. The share of the State was no doubt raised from one-sixth to one-third and later to one-half of the produce but as long as the revenue was paid, the cultivators were left in undisturbed possession of the land.

The rights of the zamindars of the early days consisted of only the right to a share of the produce, the right to the waste and the right to transit dues. The gradual deprivation of the rights of the cultivator began to occur only with the decline of the central power under the Muslim rule and as a consequence, various local chiefs and multitude of revenue farmers, assignees and grantees arose whose numbers increased with the waning of authority. As internal confusion increased, direct assessment of revenue became increasingly difficult and a class of intermediaries had to be recognised. Therefore, some semblance of a feudal system like of the West can be noticed in the beginning of the 18th century under conditions of political and administrative disorder. The later evolution of the land tenure system under the British rule was the result of the recognition of the claims of this new class of aristocracy to proprietary rights, without disturbing the rights of the individual who cultivated the lands.

Table 8 gives the distribution of the tenure system in the different States of India prior to the introduction of the land reform legislation (1947-48). It is seen that 24 per cent of the area was permanently settled under the Zamindari and Mahalwari tenure. The Ryotwari tenure covered 38 per cent of the total area. The period of settlement, like the system of tenure, showed variations from one part of the country to another. Under the Zamindari system, in large areas, mainly in Bengal, Bihar and North Madras, totalling 130 million acres, the revenue due to the government was fixed in perpetuity under the Permanent Settlement. As permanent settlement meant a loss of revenue to Government and led to rack-renting and exploitation of tenants, the areas were later settled on a temporary basis. Thus the settlement was revised every 20-30 years in Madhya Pradesh, 30 years in Bombay, Madras and 40 years in U.P. and in the Punjab.

TABLE VIII

DISTRIBUTION OF LAND TENURE SYSTEM IN INDIA : 1947-48

State	Zamindari (Individual Proprietors or Village Communities) Settled		Rai- yatwari	Total Area
	Temporarily	Permanently		
<i>Part 'A' States</i>	('000 acres)	('000 acres)	('000 acres)	('000 acres)
Assam	1,478	1,879	29,259	32,616
Bihar	4,574	39,753	..	44,327
Bombay	3,965	..	46,878	50,843
Madhya Pradesh ..	51,465	..	11,293	82,549*
Madras .. ..	..	20,946	59,924	80,870
Orissa	6,363	9,849	3,930	20,142
Punjab	22,968	..	..	22,968
Uttar Pradesh ..	59,186	9,101	..	68,287
West Bengal	3,835	14,707	..	18,542
Total	1,53,834	96,235	1,51,284	4,21,144*
Percentage	38	24	38	100

Land Revenue Statistics, 1947-48, Directorate of Economics and Statistics,
Government of India.

* Includes 19,791 thousand acres of Government Forests.

The system of revenue assessment also showed large variations. In some States as in the U.P., Madhya Pradesh and Bombay, the basis of assessment was rent, whereas in some others, as in Madras, it was the net produce. There is no definite provision for varying the assessment in any area in accordance with the changes in price, except in the State of Bombay where the Land Revenue Code has been amended to include such a provision. A large discretion is allowed to the Settlement Officer who further modifies the basic principles by introducing a number of miscellaneous factors. The net result was the incidence of land revenue

varied all over the country. In the ryotwari areas of Punjab, the assessment is not to exceed 25 per cent of net rent in the case of an assessment circle,⁴⁸ while in Bombay it varied from 35 to 50 per cent in different parts of the State. In Madhya Pradesh, the average was 50 per cent, later raised to 75 per cent whereas in the case of Madras, it was not to exceed 50 per cent. This element of inequality could be further brought out by comparing the assessment in the permanently settled areas. In Bengal, the average revenue incidence per acre for permanently settled area was Re. 0-13-5 whereas it was Rs. 2-0-7 per acre in the rest of the State. Even within the permanently settled parts, there was no uniformity, the assessment being as high as Rs. 1-12-7 per acre in the district of Burdwan and as low as Re. 0-4-3 per acre in the district of Jalpaiguri.

The most unsatisfactory characteristic of the Indian land system is in respect of rents. To a great extent, the prevailing types of land tenure have divided those interested in agriculture into two classes : (1) the zamindars and members of joint village communities and the bigger ryots who own land but do not cultivate it themselves and (2) the actual cultivators comprising smaller ryots and tenants, the latter acquiring the land on lease from the landlord on payment of rent. Roughly, almost all the area under Zamindari and Mahalwari tenure, or 64 per cent of the total area under cultivation was tilled by tenants, while the intermediaries extracted the maximum rent possible from the actual cultivator. This type of intermediaries came into being over a wider area, since even in the ryotwari areas almost every owner of over 25 acres let a part of it to a tenant.⁴⁹ Further, the practice of letting lands on lease gathered strength with the growing indebtedness of the cultivator and the transfer of land to money-lenders.

The margin between the fixed land revenue and the rent actually payable—particularly in the zamindari areas—was the direct cause of not only an increase in tenancy but a number of intermediary interests between the landlord and the actual cultivator. In Bengal, the chain of such middlemen was so long that in some cases, as many as 50 or more intermediary interests between

⁴⁸ This does not apply to land in which canal irrigation has been recently introduced or to areas charged to urban assessment.

⁴⁹ See Calvert, H. : *Wealth and Welfare of the Punjab*, p. 75.

the landlord and the cultivator were found.⁵⁰ Even the ryotwari areas were not immune to this process of sub-infeudation. Landlords could charge higher rents because of the growing scarcity of land and the absence of alternative occupations for the tillers.

Under tenant cultivation, which was the predominant characteristic of Indian agriculture, the proportion of rent that the tenant has to pay to the landlord, was a vital factor determining the income of the agriculturists. It has been estimated that almost 50 to 60 per cent of the gross produce, on an average, was handed over by the cultivator to the landlord towards payment of rent. In a country of small holdings, the vast majority of which are well under five acres in size, such proportions of rent payments are definitely high as so much is taken away from what is already insufficient to feed the cultivator and his family. There are variations both in the fixing up of the share of the produce between the landlord and the tenant, as well as the methods of payments under the different types of tenancy.

The predominant method of cultivation in the Punjab and Northern regions is the crop sharing system, popularly known as *Batai*. Under this system, the cultivator provides his own labour and that of his bullocks in return for, usually, half the crop. In the Punjab, in the quinquennium ending 15th June, 1942, out of 31·17 million acres, 15·25 million acres or nearly 50 per cent were cultivated by tenants-at-will. The majority of these were, however, owner-cultivators in one field but tenant-cultivators in the adjoining or nearby one. In respect of land irrigated by wells, the share of the produce accruing to the cultivator was one-third or less. In Bengal, approximately one-fifth of the land was cultivated through *Bargadars* on a crop sharing system, the occupancy right-holder and the *Bargadar*, each sharing one-half of the produce.⁵¹

50 The Land Revenue Commission, Bengal, 1940 observed that the development of sub-infeudation has led to a revenue system of immense complexity, particularly in districts like Bakarganj, where as many as 15 or 20 grades of tenure-holders are not uncommonly found. This chain of middlemen has shifted from one to the other the responsibility of collecting rents, and looking after the interests of the tenants. *Vide* Report—Vol. I, pp. 33-34.

51 The Congress Agrarian Reforms Committee has estimated that 20 per cent of cultivable area was under share-cropping. See Report, p. 37. See Dr. Gyan Chand's Paper on "Share Tenancies." Fourth Conference of the Indian Society of Agricultural Economics, 1943.

There is also another category of tenants known as *under-ryots* who hold rather less than one-eleventh of the cultivated area. Unlike the *Bargadars*, these tenants are protected by legislation and have security of tenure.⁵² In Uttar Pradesh, the area held by tenants of *Sir* sub-tenants was estimated at 2·7 million acres and the total number of such persons was 2·7 million.⁵³ The rents payable by the tenants have been modified to a 'fair pitch' as the result of the settlement operations and an effective control against rack-renting of tenants has been exercised by legislation. The extent of land cultivated by sub-tenants in the State is considered as probably not very large, for there are restrictions on sub-letting. In Madhya Pradesh, the position regarding sub-tenancy and rack-renting appears to be the same as in Uttar Pradesh. The State Government has observed that rack-renting is not widely prevalent. In Bihar also, a relatively small proportion of land is held by persons without occupancy rights. In Orissa, a considerable area is held on produce rent which is generally of two kinds. The commonest form is known as *Dhulibag* which implies equal division of the by-products as well as grains. The second is known as *Sanja* (Contract) under which a fixed quantity of produce is paid. In Madras, there are two types of tenancy, *viz.*, *Varam* and *Kuttakai*. Under the former, the tenant pays as rent a share of the crop, whereas under the latter, he pays a fixed sum in cash or kind. Variations are noticed in regard to the terms and methods of payments, depending on the nature of land, irrigation facilities, seed, manure and plough cattle provided by the landlord or tenant respectively and the kind of crop raised. It was estimated that 14 per cent of the agricultural population were landless tenants and 15 per cent were small holders cultivating lands of others. The total number of sub-tenants was estimated at 1·5 million.⁵⁴ The position in Bombay was similar prior to the land reform. In many cases lands were leased on a crop sharing basis.

⁵² The Indian Society of Agricultural Economics : Land Tenures in India, September, 1946, pp. 25-26.

⁵³ Report of the U. P. Zamindari Abolition Committee, Vol. II, p. 8. Dr. Radhakamal Mukerjee estimates the number of tenants at 3·2 millions.

⁵⁴ O. P. Ramaswamy Reddiar: Agrarian Reforms and Parity Economy, Statement No. 7.

The proportion of land actually cultivated by non-occupancy tenants varies very considerably in different parts of the country. The crop sharing system in one form or another generally predominates and exists in all the States. The share croppers are generally landless labourers, expropriated proprietors or occupancy tenants with very small holdings. Generally, under the system, the landlord does not contribute to the cost of cultivation, avoids all risks in the enterprise and is yet assured a return from his land. In some States, in addition to his share, he makes the tenant pay a premium and render other services for being permitted to cultivate the land.

It will be seen that the system of land tenures in India is not only extremely complicated, but is also both economically inefficient and socially inequitable. The existence of a large number of intermediaries between the cultivator and the landowner, rack-renting and the exaction of illegal cesses of various kinds, have meant that the cultivator gets a poor return from his labour and has little incentive to improve his land. The insecurity of tenancy has acted as a further disincentive to efficient production. Finally, the absence of any single system of principles in the assessment and collection of land revenue has resulted in complaints as to arbitrary distribution of the burden of taxation. It was in view of these defects of the land system in India that a comprehensive programme of land reforms was initiated after Independence.

CHAPTER IV

FOOD SUPPLY AND NUTRITION

Mention has been made earlier of the low yields of agriculture in India. These are reflected in the failure of food production to rise adequately in keeping with the requirements of the growing population.

As far back as 1880, the Famine Commission in India estimated the out-turn of foodgrains at 52 million tons and consumption at 47 million tons, thus leaving a surplus of 5 million tons ; at the same time the Commission sounded a note of warning that excessive pressure of population on the land was resulting in inefficient cultivation. The Famine Commission of 1898 significantly observed that whatever may have been the normal annual surplus of foodgrains in 1880, the 'present' surplus cannot be greater than that figure. It is possible that, for a time, improved cultivation and extension of irrigation helped to maintain an equilibrium between growth of population and food supply but soon this balance was upset. In 1914, the Prices Enquiry Committee emphatically declared that population had increased by a larger percentage in the period under enquiry (1890 to 1912) than either the total area under cultivation or the area under foodgrains; in other words, the requirements of foodgrains for internal consumption had increased in a larger proportion than the total production of foodgrains. This, in the opinion of the Committee, was due to the substitution of non-food for food crops and the inferior quality of the new areas brought under cultivation which naturally meant a comparatively low productivity. The Famine Enquiry Commission of 1945 pointed out that 30 per cent of the Indian population did not get enough to eat in normal times while the food of a great majority of the rest was unbalanced.

The only report available on the public health aspects of rural economy in India is nearly two decades old. Sir John Megaw conducted an enquiry on food consumption in Indian villages in 1933, settling nearly 600 doctors in typical agricultural villages in

all the regions. The investigation showed that only 39 per cent of the people were adequately nourished, 41 per cent poorly so and 20 per cent came under the category of 'very badly nourished.' Bengal, with proportions of 22 per cent, 47 per cent and 31 per cent under these three classifications respectively, was the worst of all the regions. The main conclusions of the Report are : (i) in nearly 40 per cent of the villages the population was excessive in relation to the food supply, as a result of which India has a very poorly nourished population, (ii) the average span of life is less than half of what it might be, (iii) periods of food scarcity or famine have been occurring in one village out of every five during a ten year period in which there has been no exceptional failure of the rains and (iv) in spite of the high death rate, the population has been increasing much more rapidly than the output of food and other commodities.

The seriousness of the situation is further confirmed by the well-known indices of over-population such as the poor physique of the people, the high death rate, the heavy infantile and maternal mortality, the wide prevalence of poverty, diseases and the heavy toll of famines and epidemics. While America and several other countries in Europe have added to the expectation of life of their population and raised it to over 62 in the last six decades—in some countries the span of life was almost doubled—India in the same period made an advance of only 7·8 years from 24·6 to 32·4 years.

MALNUTRITION

The quality of food consumed by the people is as important as quantity from the point of view of nutrition and health. Faulty nutrition is directly and indirectly responsible for a large amount of ill-health in the community. A continued insufficiency of specific nutritional elements in the Indian diet is associated with special states of illness, known as deficiency diseases which include beri-beri and *kerato-malacia* in South India and *osteo-malacia* and rickets in North India and goitre in the Himalayan regions. "Numerous investigations amongst school children in India showed that a large percentage of children are in a poor state of nutrition with consequent impairment of physical and mental growth. Again, in the adult population, the ill-effects of malnutrition are widely

evident in the shape of a low level of general health and reduced capacity for work. On the other side, the striking improvement in the condition of army recruits which takes place after a few months of abundant and satisfactory feeding is highly significant.”¹

On the basis of these investigations the Committee observed that the public health organizations in India should not merely be concerned with the prevention of diseases but with the broader aim of creating an environment in which health and efficiency grow. Malnutrition produces a state of ill-health and lowered physical efficiency, which is perhaps more dangerous than disease because it is more widespread and less noticed than disease itself.

The question is not merely one of deficiency of cereals, but of inadequacy of other nutrients : the low intake of vegetable and animal foods and of dairy products which contain valuable proteins and vitamins. The total production of milk at 22 million tons yields only 5 oz. *per capita* per day after deducting 15 per cent for the needs of the calves. In India, as a whole, the diet of the poor class includes milk, if at all, only in negligible quantity. The daily consumption of milk in Great Britain is 39 oz., in Denmark 40 oz., in New Zealand 57 oz. and in Finland 63 oz. It has been noted that the area under fruits and vegetables including spices is less than 3 per cent of the sown area. The total production of pulses provides less than 3 oz. a day. In sugar, the *per capita* availability is 1·3 oz. The consumption of eggs is small in relation to requirements.

Thus, both under-nutrition and malnutrition exist widely in the country. The daily energy requirement of an adult of either sex living an ordinary life without manual labour has been estimated at 2,400 calories. Those who do moderate work require 2,500 to 2,600 calories and those engaged in occupations involving heavy manual labour require about 2,800 to 3,000 calories. Dr. Aykroyd who conducted several studies on nutrition and value of foods in India, observed that ‘an insufficient and ill-balanced diet giving only 1,750 calories per day is typical of diets consumed by millions in India.’ Table I shows the prevalent ill-balanced diet and a

¹ View of the Nutrition Advisory Committee, quoted in the Report of the Health Survey and Development Committee, Volume II, 1946, p. 69.

well-balanced one, according to the standards of nutrition laid down by him.

TABLE I
COMPARISON BETWEEN ILL-BALANCED DIET AND WELL-BALANCED DIET IN INDIA

Items	Per Consumption Unit in oz. per day	
	A common ill-balanced diet	A well-balanced diet
Cereals	20	15
Pulses	1	3
Vegetables :—		
Green Leafy	2	4
Non-leafy	2	6
Fat and Oils	0.5	2
Fruits .. .. .	..	2
Milk	2	8
	27.5	40.0

W. R. Aykroyd and B. G. Krishnan, *Indian Journal of Medical Research*, 1936, Volume 23, p. 731.

From the point of view of quality, the main defects of the average Indian diet are : an insufficiency of proteins (in respect of both total intake and of first-class proteins), mineral salts and vitamins. Rice is the staple cereal over large parts of the country and in the rice eating areas, the consumption of pulses which provide vegetable proteins and certain vitamins and of milk, eggs, fish and meat is definitely low. The consumption of vegetable and fruits is also much below the desirable level. Lastly, the average rice eater's diet does not contain a sufficient quantity of fat of vegetable or animal origin.

EFFECTS OF WAR

The food situation in India became noticeably acute during the war. Some of the factors responsible for the increased demand for food stuffs during the war period were : the additional requirements for a million evacuees and war prisoners and for a large foreign army stationed in India and the increase in internal

consumption consequent on the new recruits to the army and the workers in the war industries consuming food in larger quantity than before the war. On the supply side, the position had definitely deteriorated. Since the loss of Burma, there was a reduction of nearly 5 per cent in the supply of rice for consumption. As the Central Government then hesitated to adopt any bold comprehensive policy, the several provinces tried to tackle the problem without any co-ordinated plan. While efforts were made to grow more food, the net imports of foodgrains steadily decreased from 2·15 million tons in 1939 to 1·23 million in 1940 and 0·5 million tons in 1941. In 1942, exports exceeded imports by 0·2 million tons. The prospects of increased food production appeared vague and uncertain as there was no definite policy for regulating relative prices or for increasing production effectively.

Government tried to evolve a policy of price control of food-stuffs through an extended process of trial and error. India had to go through the experience of failure of supplies, black market, hoarding and break-down of the distributive machinery. This was a contrast to the successful food policy adopted in various countries directly involved in war. Price controls were adopted in a piecemeal manner and there was no co-ordination between the various provincial policies. Even after three years of conferences and debates, the Government of India were not in a position to take over the entire procurement operations and assure to every citizen adequate food at reasonable prices.

BENGAL FAMINE

The failure of administration in India in the initial years of the war to meet the emerging situation created an unprecedented crisis in Bengal. The Bengal famine of 1943 was a tragedy which caused the deaths of probably one and a half million people. It shocked the conscience of the whole world. Instances were recorded of sales of land in exchange for a week's supply of food. The famine meant a complete disruption of the socio-economic life of Bengal. The Commission under the Chairmanship of Sir John Woodhead which reported in 1945 revealed that the problem was not merely one of relief for the destitutes ; it reflected a long-run maladjustment between the supply and demand for food. The Famine Enquiry Commission laid the blame not only on the

Government of Bengal which ought to have taken steps to control supplies effectively and to distribute them at reasonable prices but also on the Government of India which ought to have established a system of planned movement of foodgrains from surplus to deficit provinces. They concluded : "It has been for us a sad task to enquire into the course and the causes of the Bengal famine. We have been haunted by a deep sense of tragedy. A million and a half of the poor of Bengal fell victims to the circumstances for which they themselves were not responsible. Society, together with its organisations, failed to protect its weaker members. Indeed, there was a moral and social breakdown, as well as an administrative breakdown."²

The urgency of the long-term problem of increasing food supplies will be seen more clearly if we reflect on the relation of food supply to national health. Sir John Megaw's and Dr. Aykroyd's investigations have clearly brought out how under-nourishment and malnutrition are responsible for the low standards of physical development and the easy susceptibility of the people to disease and death. If under such 'normal' conditions of morbidity should a famine occur, the results can only be disastrous.

This is in contrast to conditions in other countries where measures to improve food production and nutrition have been part of accepted policy. In the inter-war period the average consumption of protective food in Great Britain increased roughly by about 50 per cent and the children leaving school in 1938 were between 2 to 3 inches taller than their parents at the same age. There have been no similar improvements in India. On the other hand, the trend has been in the reverse direction. Milk consumption, for instance, increased in Great Britain from 754 million gallons in 1938 to 945 million gallons in 1941 or by 25 per cent. The Report on the Marketing of Milk in India states that the daily *per capita* consumption of milk in the country fell by 12 per cent to 5·8 oz. between 1935 and 1940.

The requirements of food supply in India are, therefore, an increase in quantity and an improvement in quality. A comprehensive policy of maximum food production with special re-

² Report, p. 107.

ference to the more nutritious cereals and vegetables and animal foods is necessary in the interests of health and efficiency of the growing population. The production drive would have to be supplemented by provision for instruction of the people regarding the nutritive value of different kinds of foods, the methods of cooking and the relation between food and health.

EVOLUTION OF FOOD POLICY

Grow More Food Campaign

The evolution of food policy in India started with the Grow More Food Campaign. There has always been regular imports of rice from Burma, after separation, ranging from $1\frac{1}{2}$ to 2 million tons. These imports, though small as compared to the overall production of the country served the dual purpose of augmenting internal supplies and of regulating prices. When it became clear to India that the normal supplies from Burma would be cut off by the entry of Japan into the War, a conference of representatives of the Provinces and the States which met in April 1942 made certain recommendations for increasing food production in the country to offset the loss of normal imports of rice. These have formed the basis for the GMF campaign. The main lines of action between 1943 and 1947 were : (i) to switch over from cash crops, mainly from short staple cotton to food crops, (ii) to intensify cultivation of lands already under cultivation, through irrigation, better seeds and manure and better farming practices and, (iii) to extend cultivation by bringing under the plough current fallows, cultivable wastes, etc. In this first phase, no target of food production was fixed.

The movement was placed on a planned basis from 1947-48 when it was decided to continue the GMF campaign for another five years. The target of additional production for the period was fixed at 4 million tons. This target was distributed among the Provinces and States according to the facilities available. The third phase followed the adoption of the recommendations of the Food Grains Policy Committee (1947). The Committee suggested a target of 10 million tons of increased production out of which 3 million tons were to be achieved by the reclamation of about 10 million acres of land. They also suggested an organisational set up based on village panchayats and co-operative societies to help in the production drive.

It was found on a review of the food position towards the close of 1948 that the sense of urgency which was essential for the success of a programme of this magnitude had not been realised in the country and that a re-orientation of policy was necessary. On the advice of Lord Boyd Orr who was invited specially to review the working of the campaign, a definite process of co-ordination between the Centre and the States with wide powers to execute the programme was initiated by the appointment of a Commissioner of Food Production at the Centre with corresponding officers in the States. These were all assisted by sub-committees for taking quick decisions and for ensuring the implementation of policies without delay. The objective of this new policy was to attain self-sufficiency by March 1952. The deficit to be made up by the target date was 4·8 million tons over the production in the year 1947-48. This was the fourth phase of the campaign.

When this programme of self-sufficiency was put into operation, an acute shortage of cotton and jute was felt owing to devaluation and difficulties of getting raw materials from Pakistan ; therefore, the policy had again to be revised with a view to finding out a formula by which there could be a simultaneous increase in production for foodgrains as well as cotton and jute. This 'Integrated Production Programme' (June 1950) envisaged a diversion of areas from foodgrains to these crops to the extent of about 1·5 million acres in 1950-51 and 2·2 million acres in 1951-52. Subsequent additions were made to the scope of this scheme which included the reclamation of 3 million acres of land in seven years from 1949-50 under the Central Tractor Organisation. Besides, schemes relating to fisheries, subsidiary foods and crop competitions were added.

The financial assistance for approved GMF schemes was in the form of loans and grants. Loans were generally medium term, repayable in five to ten years ; short-term loans for one year for purposes of seeds and fertilisers were also given. The grant of subsidy was shared between the Central and State Governments on the basis of 50-50, except in the case of Assam and Orissa, where the Centre shared 66⅔ per cent. In regard to 'Part 'C' ' States, the whole subsidy was borne by the Central Government. The total expenditure sanctioned for the GMF campaign from

1943 onwards upto 1950-51 was Rs. 67·5 crores which included the share of the Food Procurement Bonus given to the State Governments to procure larger quantities of foodgrains.

The targets of additional production fixed for the various phases of the campaign and the short fall in achievement are indicated in the following table.

TABLE II
ACHIEVEMENTS AND TARGETS OF ADDITIONAL PRODUCTION
UNDER THE GMF CAMPAIGN*

Period				Target (in lakh tons)	Achievement (in lakh tons)
1947-48	..	..	..	9·09	6·97
1948-49	..	..	..	8·86	7·95
1949-50	..	..	..	9·85	8·11
1950-51	..	..	..	17·00	11·00
Total	..	..	..	44·80	34·03

* Report of the Grow More Food Enquiry Committee, Government of India, June 1952, p. 14.

A check on the results through special surveys showed that the out-turn reported by the States was over-estimated by about 20 per cent. The actual increase was about 2·7 million tons instead of 3·4 million tons shown in the table.

After 1950-51, the integrated scheme of food production was incorporated in the First Five-Year Plan. There was a serious failure of food crops in the very first year of the Plan and the shortage in foodgrains could only be met through large imports of foodgrains, financed partly out of the U.S. Wheat Loan. In 1951, imports of foodgrains rose to 4·7 million tons from 2·1 million tons in the previous year and in 1952 also imports were as high as 3·9 million tons.

In the third year of the Plan period, food production increased substantially and even exceeded the targets set in the Plan.

The table below shows the trend of production during the Plan period.

TABLE III
FOOD PRODUCTION AND TARGETS: 1951-1957
(in million tons)

	1951-52	1952-53	1953-54	1954-55	1955-56*	1956-57**	Targets of Production	
							1st. Plan	2nd. Plan
Rice	20.96	22.54	27.77	24.53	26.85	28.14	27.2	33.4
Wheat	6.09	7.38	7.89	8.78	8.57	9.07	8.3	11.6
Other cereals	15.84	19.30	22.61	22.42	19.04	20.04	17.0	22.5
Total cereals:	42.89	49.22	58.27	55.73	54.46	57.25	52.5	67.5
Gram and Pulses	8.3	9.1	10.45	10.87	10.83	11.43	—	—
Total foodgrains	51.19*	58.32	68.72	66.60	65.29	68.68	61.6	75.0

* Partially revised estimates.

** Final estimates.

A substantial part of this increase must be attributed to good monsoons, as the fall in output in the following two years showed. Although the total output of cereals improved in the first year of the Second Five-Year Plan it was still below the level reached in 1953-54. The paramount need for a substantial increase in food output is underlined by the continuing dependence on large imports of foodgrains and the fact that the demand for foodgrains is bound to rise with the increase in expenditure on development. Even before the war, substantial imports of food of 1 to 2 million tons were necessary, and the difficulties of the war years, during which little could be imported, demonstrated the dangers of inadequate effort in this direction. From 1946 to 1953 food imports never fell below 2 million tons and they reached a peak of 4.73 million tons in 1951. Food imports were less than 1 million tons in 1954 and 1955 partly as a result of the exceptional increase in output in 1953-54, but large imports have again become necessary since then. Whether one considers the problem in terms of a stable price level or in terms of economising foreign exchange, or against the needs as measured by the absolutely low levels of nutrition in the country, increased food production is a basic desideratum. The prevailing levels of productivity are so low that substantial increases should be possible, given well-directed effort all along the line.

FUTURE PROSPECTS

On the other hand, the problem posed by secular growth of population is hardly encouraging. Reviewing the position of food supplies historically, the 1951 census report observes that "in or about 1880 India was normally surplus in foodgrains, including both wheat and rice, and the surplus was of the order of 12 lakh tons per annum." This situation continued till 1921 when *undivided* India changed over from being a net exporter of foodgrains into a net importer of foodgrains. The level of average imports rose slowly and is still low, when compared with the rapidity of decline of cultivation *per capita*. A study of eight natural divisions and some of the districts of five other regions, covering a third of the population, conducted by the 1951 census, revealed that there was a decline in the percentage of area sown to foodgrains to the total sown area under all crops, the proportion of area under food crops in the districts being 80.7 per cent in 1891, 77.8 per cent in 1921 and 77.2 per cent in 1951. The difference between 1921 and 1951 is hardly significant. The main increase in imports, which took place during the last three decades, cannot therefore be attributed to the shift in cultivation away from foodgrains.³ In other words, the origin for the rapid growth of net imports after 1921 has to be traced to the decline of cultivation *per capita*. The situation is summed up in Table IV which traces the growth of population and area under cultivation in the last six decades.⁴

TABLE IV
GROWTH OF POPULATION AND AREA UNDER CULTIVATION

Census Year	Population (in lakhs)	Net area sown (in lakh acres)	Per capita area (in cents)		
			Cultivated land	Double-crop area	Irrigated area
1891	814.8	889.6	109	12	16
1901	818.3	840.0	103	11	17
1911	842.2	915.3	109	11	17
1921	833.3	926.3	111	13	18
1931	906.9	942.7	104	11	15
1941	1,017.3	958.2	94	11	16
1951	1,178.8	990.9	84	10	14

Census of India, 1951, Volume I, India, Part I—B—Appendices, pp. 48-49.

³ Census of India, 1951, Volume I, India, Part I—A—Report, 1953. p. 168.

⁴ The figures relate to all the districts of eight natural divisions and some of the districts of five other regions studied by the 1951 census and are taken as representative for the country.

The figures bring out the sharply contradictory character of the trends of change before and since 1921. Prior to 1921, growth of population and cultivation were nearly in balance. Population increase was fitful and slow, and increase in cultivation managed to keep pace with it. After 1921, however, population growth has been rapid and uninterrupted, while increase in cultivation, even where it has occurred, has been small and proportionately much less than the increase in population. Therefore, cultivation *per capita* had maintained substantially the same level upto 1921. Since 1921, cultivated land *per capita* dropped steadily at each census period; it came down from 1.11 acres in 1921 to 0.84 acres in 1951. The magnitude of this drop is nearly 25 per cent of the 1921 level, which is very substantial. This trend suggests that the extension of cultivated area has failed to keep pace with the increase of population. The facts indicate that other things being equal, every man, woman, and child must expect to get distinctly less food and other agricultural produce from the land at the end of the period than at the beginning.

The implications of a drop in the productivity of cultivation *per capita* are reflected in the process of intensification of cultivation. In all the districts studied by the 1951 census, the *per capita* double crop area and irrigated area increased respectively from 12 and 16 cents in 1891 to 13 and 18 cents in 1921 but dropped to 10 and 14 cents in 1951. Each of these factors which was a little higher in 1921 than in 1891, changed but little during the first thirty-year period; but during the second thirty-year period, however, each declined steadily and was substantially lower in 1951 than in 1921. Although the double-crop area and irrigated area increased somewhat faster than the cultivated area, the increase during 1921 and 1951 was, however, very much less than the increase of population. Thus during the three decades before 1951, *per capita* cultivation as well as the *per capita* area under double crop and irrigated area declined steadily, ultimately resulting in the emergence of food shortage.

Against this trend in the past, the question that naturally arises is: Shall we be able to develop agriculture so as to keep pace with the growth in population in the future? The Census Commissioner, in the 1951 census report, has attempted to project

these past trends and to assess the likely increase in demand for food. On this basis, the following table indicating future growth of population and agricultural productivity for the next three decades has been presented.

TABLE V
GROWTH OF POPULATION AND AGRICULTURAL PRODUCTION:
1961-1981

Year	Population (in millions)	Needed agricultural productivity (in Lakhs of Annual Tons)	Targets of develop- ment of agricultural productivity (in Lakhs of Annual Tons)
1961	410	850	150
1971	460	960	260
1981	520	1,080	380

Census of India, Volume I, India, Part-I-A—Report, p. 194.

It may be recalled that the 1951 census estimated the shortage of foodgrains in 1951 at 34 lakhs of tons, assuming 750 lakhs of *annual* tons of agricultural productivity required to feed and clothe 360 million people at the "current" levels of consumption, or 5 *annual* tons for every 24 persons.⁵ The figures in Table V are worked out on the same lines. The need by way of agricultural productivity is estimated at 850 lakh *annual* tons in 1961, 960 lakh *annual* tons in 1971 and 1,080 lakh *annual* tons in 1981. These levels of agricultural productivity are required to feed and clothe a population of 410 millions in 1961, 460 millions in 1971 and 520 millions in 1981; the targets of development of agricultural productivity over 1951 for the three decades being respectively 150, 260, and 380 lakh *annual* tons. The increase in food production required over the 1951 level of production is computed at 21 per cent before 1961, 37 per cent before 1971 and 54 per cent before 1981. The targets are minimal estimates of the scale and tempo of development which are essential if existing shortages are to be overcome in respect of food and clothing needed by the growing population. If the future rate of development of agricultural productivity falls short of these targets, there will be less food and cloth to go round for all or greater reliance will have to be made on imports of foodgrains or cotton or both. The forecast is indicative of the magnitude of the problem facing the country.

⁵ Census of India, 1951, *Op. cit.*, p. 193.

CHAPTER V

SOCIAL SERVICES

To complete the review of basic facts on our rural life and problems, it is necessary to sketch the scope of social services in India. Such services in Western countries have contributed materially to the real income of the poorer classes by providing them with amenities and facilities which would otherwise be outside their reach. They have also the wider objective of correcting maladjustments in the present economic system, allaying social distress and class conflict and improving the standard of education and enlightenment in the community. An increasing proportion of the State's income is, therefore, devoted in these countries to nation-building activities. This implies a redistribution, on the one hand, of the burden of taxation and, on the other, of the benefits of public expenditure in the interests of the poorer classes.

INADEQUACY OF DEVELOPMENT

In India, there has been a radical change in the aims and scope of State policy in respect of social services since Independence. Prior to this, the main concern of Government was external defence and internal security. In matters of positive economic and social reform, the key note of policy was "*laissez faire*". The recurrence of famines in the 19th century, however, compelled Government to undertake relief measures on an extensive scale from time to time. The pressure of developments abroad and in the country necessarily led to some modification of the general attitude of passivity towards economic reforms. The introduction of Diarchy in 1919 strengthened the popular demand for increasing nation-building activities but little could be done, as the popular ministers had no control over finance. The allocation of revenue between the Centre and the Provinces was another factor hindering the extension of social services. The political and administrative set up of India till the attainment of Independence left, therefore, little scope for the development of social services and the

progress recorded in this sphere was meagre relatively to that attained in other countries and to the needs of this country.

Since the advent of Independence the allocations for social services have increased progressively and an attempt has been made in the First and Second Five-Year Plans to implement to the extent possible the directives of the Constitution in this regard. The expenditure on vital services like education, health and housing is regarded as of high priority, but there are limitations of resources which come in the way of more rapid advance. Since 1951-52, the expenditure on social services at the Centre and in the States has been about doubled while expenditure on development has gone up about four-fold.

In the sphere of education, in spite of the directives of the Constitution to provide free and compulsory primary education for all children upto the age of 14, only 63% of children in the age group 6 to 11 and 22·5% of children in the age group 11 to 14 would be provided such education by 1960-61. This in itself requires the establishment of 53,000 new primary schools and 3,500 middle schools. The basic difficulty in extending health services lies in the lack of trained personnel. Although the number of doctors, nurses and health assistants is to be increased by 18, 41 and 75 per cent respectively in the Second Plan period, there will still be a relative shortage.

HEALTH SERVICES AND MEDICAL RELIEF

The prevention of contagious diseases and epidemics has attracted more attention than any other welfare activity because of their wide incidence and frequent recurrence in the country. The medical services were originally designed to protect the health of the Army and the foreign personnel in the country. Till 1870, they were intended to improve, primarily, the health of the military and only secondarily that of the general population. The heavy mortality in times of famine, plague and malaria necessitated more active measures at the beginning of the present century but, almost till the Reforms of 1919, the efforts were confined, more or less, to the promotion of sanitation by making it one of the most important duties of local bodies. Progress was very slow even in this limited direction. The Reforms of 1919 which transferred the

responsibility for local medical and public health administration to the Provincial Governments considerably widened the field of activity, but the quality of work still suffered from the weak control of the Provincial authorities over the local bodies to whom the work was entrusted. The result was that only a fraction of the ground could be covered by these provisions. Even in urban areas, where the improvement is more marked than in rural parts, the level of health services continues to be low.

The health administration is particularly unsatisfactory when the needs of the rural masses are considered. Table 1 gives the

TABLE I
PROPORTION OF MEDICAL PERSONNEL TO POPULATION IN
INDIA AND THE UNITED KINGDOM

Class of personnel	Number available in 1946 in India			Ratio of medical personnel to population		Ratio in the United Kingdom	
Doctors 47,500	1 to	6,000	1 to	1,000
Nurses 7,000	1 to	43,000	1 to	300
Health Visitors 750	1 to	400,000	1 to	4,770*
Midwives 5,000	1 to	60,000	1 to	618†
Qualified Pharmacists 75	1 to	4,000,000	1 pharmacist to 3 doctors	
Qualified Dentists 1,000	1 to	300,000	1 to	2,700

Report of the Health Survey and Development Committee, Volume IV—Summary, 1946, p. 4.

* Based on 1935 figure.

† Based on 1943 figure.

proportion of medical personnel available to population as compared with the United Kingdom. Nearly 75 per cent of the doctors are in urban areas. In 1951, dispensaries, hospitals and other medical institutions totalled 8,600 with 1,13,000 beds. These can treat annually only 51·3 million patients, the bulk of the population thus being left to rely on whatever assistance, expert

or otherwise, they can locally secure. The extent of shortages in the elementary services for the mass of the people is indicated below¹ on the standard of 1 hospital bed for every 1,000 population, 1 nurse and 1 midwife for every 5,000 population, and 1 health visitor and 1 sanitary inspector for every 20,000 population.

	1950-51	1955-56	Requirements
Doctors	59,000	70,000	90,000
Nurses (including auxiliary nurse-midwives) ..	17,000	22,000	80,000
Midwives	18,000	26,000	80,000
Health Visitors	600	800	20,000
Nurse-dais and dais	4,000	6,000	80,000
Health Assistants and Sanitary Inspectors ..	3,500	4,000	20,000

The mortality rate still continues to be high, although it has fallen from 19.7 per 1,000 in 1947 to 12.9 in 1954.

The recommendations of the Planning Commission on the problem of organising medical relief and public health in India on national basis, are based on the investigations made by the Health Survey and Development Committee in 1946.² In 1955-56, there were 10,000 medical institutions with about 1,25,000 beds. At the end of the Second Plan period, the increase expected is 26% in institutions, *i.e.*, 12,600 in institutions and 24% in beds, *i.e.*, 155,000. The health units set up in the First Plan period were 725 while the target for the Second Plan period is 3,000. The number of medical colleges increased from 30 in 1950-51 to 34 in 1954-55 and 42 in 1955-56. The training facilities available provide for an annual out-turn of about 2,500 doctors during the Second Plan period. The country has only 600 to 700 qualified dental surgeons, a fraction of the needs.

¹ Report on the Second Five-Year Plan, Planning Commission, Government of India, 1956, p. 538.

² The Committee recommended that after 40 years, the most up-to-date medical aid should be available to all without any reference to ability to pay for it. The long-term objective was to secure hospital accommodation on a scale that would provide 5.67 beds for every 1,000 of the population while then (1946) it was one bed for over 4,000 persons. Particular stress was placed on preventive measures and attention was rivetted mainly on the needs of the rural population. The Committee observed that "the debt which India owes to the tiller of the soil is immense and although he pays the heaviest toll when famines and pestilence sweep through the land, the medical attendance he receives is of the most meagre description. The time has come to redress the neglect which has hitherto been the lot of the rural areas."

Concerted programmes for sanitary reform, village planning and housing schemes are in their first stages over the major part of rural India. The provision of protected water supply and sanitary methods of excreta disposal is a basic requirement in the prevention of mortality and morbidity in the community which largely arises out of water-borne and allied diseases. In the Second Plan, a provision of Rs. 53 crores has been made for urban water supply and sanitation and Rs. 28 crores for rural water supply. Regarding rural sanitation, hardly 5 per cent of the houses in the villages have any type of latrines. In the First Plan period, the schemes for the development of health services could not make satisfactory progress; in particular, the rural portion of the work was held up primarily due to lack of trained personnel and organisation.

EDUCATION

Education is in many ways the most important of social services. It increases the capacity of the people to participate intelligently in public affairs. Education is the most vital element in the development of individuality; it is also an instrument for fostering and strengthening socially useful skills, habits and attitudes. The higher the standard of education, the better the results of other social services. In 1938-39, only 11·6 million pupils or 3·9 per cent of the total population were receiving primary education; pupils under instruction in all institutions were 5·6 per cent of the population. In 1955-56, provision of facilities for schooling of children in the age group of 6 to 11 was available for 24·8 million or 51 per cent of the children in that age group. In the age group 11 to 14, provision was available for 19·2 per cent of the children and in the age group 14 to 17, for 9·4 per cent. The primary junior basic schools numbered 274,038 in 1955-56. In the same year, there were 10,926 junior basic schools, 19,270 middle senior basic schools, 1,529 senior basic schools, 10,695 higher secondary schools and 334 multi-purpose schools. There were 32 Universities. The Colleges numbered 965 of which Arts Colleges³ numbered 485. The total number of scholars in the schools was over 32·2 million and in the colleges 720,000 giving a total of about 33 million. While facilities for education are, in general, less than adequate, those for women's education are

3 The figures are for 1949-50.

even more unsatisfactory. The number of schools and colleges for girls was 24,314 and 93 respectively (1949-50).

The Report of the Sargent Commission on Education visualised a national scheme suited to the minimum requirements of the country. The estimated cost of the scheme at the end of 40—50 years when it was expected to be fully established, was Rs. 313 crores, of which Rs. 277 crores were to be drawn from public funds. The inadequacy of the level of expenditure on education becomes obvious when it is compared with the actual expenditure under these heads amounting to Rs. 112 crores in 1950-51, of which Rs. 63·9 crores came from Government.

Since 1949-50, there has been a 50 per cent increase in the admissions to institutions of higher education and the out-turn of the scholars. Compared to 1947, the increase is as much as three-fold. These data indicate the demand for educational facilities and the inadequacy of the present provision. A total provision of Rs. 57 crores is made for University education in the Second Plan, the greater part of the expenditure being on consolidation and increased provision for technical and scientific education. In considering the programmes for education, it has to be borne in mind that the problem is not merely one of multiplying the facilities along traditional lines, but of diversifying the system and adapting it to the new needs of a developing economy.

Social Education

The work in the field of social education has been mostly confined to literacy. As a result of the work in recent years, the literacy percentage increased from 8·3 in 1931 to 16·6 in 1951. Even if children below 10 years are excluded, the percentage of literacy is only 20. The serious disparity in literacy between men (24·9 per cent) and women (7·9 per cent) and between the urban population (34·6 per cent) and the rural population (12·1 per cent) constitutes a special problem in social education. Most of the post-literacy work is done through libraries, though due to the dearth of literature, the library movement has not made much headway in the villages. Recently, the importance of recreation and cultural activities in programmes of social education has been increasingly recognised. Existing forms of folk art like dance,

drama, puppet shows, fairs and festivals, *bajan*, *kirtan*, etc., have been used, but without any systematic attempt to develop and fully exploit their potentialities for mass education. Modern means of mass education like the film and the radio have attracted greater attention, but these are costly media. In a few institutions, attempts have been made to improve the economic conditions of the villagers by teaching them improved crafts and agriculture. All-round social education work has been done by some of these basic institutions, besides co-operatives which have also been used as an agency for social education.

SOCIAL INSURANCE

Social insurance is another important service that has been recognised to be a responsibility of the State. In respect of industrial labour, in regulating working hours, provision for leave with pay, workmen's compensation, etc., India is more or less on par with the advanced countries. However, the more vital provisions of welfare such as unemployment and health insurance and family allowances are almost unknown to the Indian labourer. The importance of providing good housing has been realised but the slums still continue. The detailed recommendations of the Royal Commission on Labour (1931) remained unimplemented for a long time. In the post-war period a scheme of sickness insurance for industrial workers has been put into operation and provident fund benefits have been extended rapidly in recent years.

The State has accepted the principle of minimum wages for both industrial and for agricultural labour. The application of the principle to agricultural wages has, however, presented serious difficulties, mainly because of the socio-economic conditions prevailing in rural areas.

Schemes for cattle insurance and crop insurance, as integral parts of security measures for protection of agriculture have not been found practical under the uncertain conditions of the agricultural economy.

THE PROBLEM

The survey of the Indian Rural Problem presented in the previous pages brings out the broad picture of the resource potential available in the country for economic development and the inadequacy of the efforts made and policies adopted in the past to secure rapid all-round development. Agriculture which absorbs some 70 per cent of the working force still fails to provide a reasonable standard of living to the people, and the growth of industry, trade, transport and ancilliary services has been far below the requirements of a growing population.

The analysis of facts, presented here with reference mainly to the agricultural sector, reveals deficiencies in the organisation of economic resources, deficiencies which have expressed themselves in the exhaustion of the soil, the existence of chronic famine areas, recurrence of periodic famine conditions, the low income levels and chronic indebtedness of the peasantry, unemployment and under-employment among the agriculturists and other sections of the rural population and the dearth of social services.

This picture brings home not merely the magnitude of the problem but also the urgency of a planned effort towards re-adjustment of the economy on a progressive basis. It would be an error to attempt to reconstruct the rural economy in terms of short-range remedies ; what is required is integrated development of the whole economy with special stress on a revitalisation of the rural sector, and this involves, besides considerable developmental outlays, far-reaching structural or institutional changes.

PART II

REFORM POLICIES AND MEASURES : OFFICIAL AND NON-OFFICIAL

CHAPTER VI

EVOLUTION OF INDIAN AGRICULTURAL POLICY

TRADITIONAL AGRICULTURE IN INDIA

Before the advent of the British, India had evolved a socio-economic structure which maintained some kind of a static equilibrium. Population growth was slow ; the pressure on land was not yet felt. Traditional agriculture developed as a part of this pattern of socio-economic evolution. The methods of cultivation had settled down to a customary routine based on the practical experience of generations of shrewd, though not educated, farmers. The stratification of rural society on the basis of the caste system provided a shelter for everyone, however humble ; above all, the old village economy based on self-sufficiency was a protection against political cataclysms.¹ The standard of living was by no means high but India had developed a fairly balanced economy. The fame which India had earned in the outside world for her handicrafts and artistic products was maintained ; her ships crossed far-off seas. The high state of 'industrial' development in India at this time when the west of Europe, the birth-place of modern civilisation, was still in a primitive stage, has been a fact of recorded history.² The impact of modern industrialism destroyed the self-sufficiency of the village. The old towns, the centres of handicrafts and manufactures decayed. The old social order based on status and custom gave place to a new one based on contract and the cash nexus with a centralised system of admi-

1 "The cultivator is thus a member of a definitely organised community, which has, as far back as the history of social organisation in India can be traced, been dependent on itself for the means of living and, to a very large extent, for its government." As a result, the typical cultivator is, within the sphere of his experience, self-reliant and "both his methods of cultivation and his social organisation exhibit that settled order which is characteristic of all countries in which the cultivating peasant has long lived in, and closely adapted himself to the conditions of a particular environment." Report of the Royal Commission on Agriculture in India, p. 479.

2 Minute of Dissent by Pandit Malaviya, Industrial Commission Report, pp. 296-97.

See also R. C. Dutt, *Economic History of India*, p. vii where India is described as "a great manufacturing as well as a great agricultural country" in the 18th century, the products of the Indian looms supplying the markets of Asia and Europe.

nistration. While the old system was allowed to crumble, nothing new was designed to be put into its place.

BEGINNINGS OF AGRICULTURAL POLICY

The series of famines in the country after the seventies of the 19th century impressed on the Government the need for placing Indian agriculture on a sounder footing and improving the economic conditions of the masses. The Famine Commissions of 1880, 1898, and 1901, the Irrigation Commission of 1903 and the Committee on Co-operation of 1915 made several constructive suggestions for the improvement of agriculture and for the promotion of the welfare and prosperity of the rural population.

The Commission appointed in 1866 after the great famine of Bengal and Orissa proposed for the first time the creation of a special agricultural department. This was however considered premature. In 1869, the cotton interests in England which had considerable influence in shaping the agricultural policy of the Government of India urged the Secretary of State to undertake measures for the improvement of cotton in India and with that purpose, to set up a separate Department of Agriculture in each province. However, little real progress could be made until 1880. The Famine Commission of 1880 made a thorough enquiry into the problem and made extensive suggestions in their report for agricultural improvement. The provision of irrigation facilities and the improvement and extension of the means of communication were among the main recommendations of the Commission. The Commission also recommended that industries should be developed to absorb the surplus population on the land. It referred to the unfortunate circumstances that made "agriculture almost the sole occupation of the mass of the population" and pointed out that "no remedy for present evils can be complete which does not include the introduction of a diversity of occupations through which the surplus population may be drawn from agricultural pursuits, and led to find the means of subsistence in manufactures or some such employments."³ The other proposals of the Commission were : (i) revival of the Department of Agriculture of the Government of India for collecting experience of past

famines and undertaking definite and permanent charge of the administration of famine relief, (ii) simultaneous formation in all Provinces of Departments of Agriculture with a large subordinate establishment working under each Director of Agriculture, (iii) distribution of loans to farmers by Government on the security of land and (iv) appointment of special courts to examine the debts of agriculturists with a view to effecting an equitable reduction and arranging for payment by instalments. As the Royal Commission on Agriculture mildly put it : "The Government of India took no immediate action on the proposals and the next ten years were spent mainly in conferences and in investigating the position in the Provinces with a view to discovering the lines of development best suited to their needs."⁴

DR. VOELCKER'S REPORT

The improvement of agriculture in India was first thought of in terms of agricultural chemistry. Dr. J. A. Voelcker, Consulting Chemist to the Royal Agricultural Society was deputed to India in 1889 "to advise upon the best course to be adopted in order to apply the teachings of agricultural chemistry to Indian agriculture." His report has left its impress on all subsequent investigations dealing with agriculture in India and the Royal Commission of 1928 also drew largely on it. Dr. Voelcker first of all exploded the myth that Indian agriculture was, as a whole, primitive and backward. "At his best the Indian *raiyyat* or cultivator is quite as good as, and, in some respects, the superior of the average British farmer, while at his worst, it can only be said that this state is brought about largely by an absence of facilities for improvement which is probably unequalled in any other country Certain it is that I atleast have never seen a more perfect picture of careful cultivation, combined with hard labour, perseverance, and fertility of resource than I have seen at the very many of the halting places in my tour."⁵

In the opinion of Dr. Voelcker, the differences in agricultural conditions and practices in India were accountable to three factors :

⁴ See Report, pp. 17-18.

⁵ Report on the Improvement of Indian Agriculture, p. 11.

- (i) differences "inherent in the people themselves" as cultivating classes which distinguished certain castes and races as good at farming from others.
- (ii) differences arising from purely external surroundings such as : (a) natural causes like climate, soil, facilities for water, manure, wood, grazing, etc., (b) economical or political conditions like the relative ease or difficulty of living, paucity or pressure of population, etc.
- (iii) differences "arising from want of scientific knowledge," for instance, of the existence of diversity of agricultural practices in different parts of the country.

These differences have been illustrated in the report so as to indicate in each case the possibilities of improvement and the agencies, Government as well as private, through which and the manner in which these improvements could be brought about. While some of the differences are rooted in the physical and social environment and are therefore difficult of improvement, others are more easily amenable to reform. An analysis of agricultural conditions and problems along these lines at once gives the clue to the directions of improvement to which the agencies have to apply themselves. The report discusses in turn, soils, manures, forestry, animal husbandry, seed improvements, rural education, research, the organisation of statistics, etc., and on each one of these heads, the suggestions offered have value even under present conditions.

Dr. Voelcker refers to "a pretty general belief that the soil is becoming less productive" and attributes this to the lack of manures and "the export of oilseeds, cotton and other products, besides an increasing one of wheat, all of which remove a considerable amount of the soil constituents." In regard to the remedial measures, the report points out that improvements in the system of land tenure, improvement of the land by expenditure of public and private capital on it and similar measures may alleviate the conditions of the Indian cultivator but they will not give him larger crops and they will not provide the food that the people must have to live upon. For this, the soil itself must be looked into, as it alone can produce the crops and manure alone can enable it to bring

forth the necessary increment.⁶ The appropriate remedies suggested are irrigation by canals, tanks and wells and the use of manures.

As to manures, it is pointed out that the Indian cultivator was not ignorant of their utility. The practice of burning of cowdung was largely due to the absence of cheap fuel; it was therefore the duty of Government to provide the people with wood for fuel to prevent this wasteful practice. "More wood means more manure, more manure means more crops and more crops means an increasing revenue to the State. To the cultivator it implies more fodder, better cattle and more manure again to ensure the future fertility of the soil."⁷ These indicated a new policy for protection of forest resources and for the promotion of arboriculture. The report emphasises the need for a change of outlook on the part of the Forest Department and observes, "the results must not be gauged by financial considerations alone, but by the benefits conferred on the agricultural population, the keeping up of the soil fertility and the maintaining of the land revenue to the State."

Among "the economical and political conditions" which contributed to the low productivity of Indian agriculture, the report mentions the small size of holdings, want of capital, rural indebtedness and defective land tenures. It emphasises the need for detailed scientific investigations on agricultural practices in India, cautions against the belief that Western knowledge and practice could simply be grafted on to Indian practices and argues the case for general as well as agricultural education.

AGRICULTURAL POLICY UPTO 1905

The policy upto 1905 was directed to the strengthening of the departmental organisation on the basis of the recommendations of Dr. Voelcker. At the suggestion of the Agricultural Conference held in 1820 Dr. J. W. Leather was appointed Agricultural Chemist to the Government of India. The need for development in other directions was also felt soon. In 1901, an Inspector-General of Agriculture, and a Mycologist, and in 1903, an Entomologist were

⁶ *Vide* Report, pp. 39, 41, 42.

⁷ Report, p. 137.

appointed. About this time Mr. Henry Phipps of Chicago offered a donation of £30,000 to Lord Curzon to be applied to some object of public utility, preferably connected with scientific research. This donation was used for the establishment of the Agricultural Research Institute at Pusa. In the meanwhile, there was a series of droughts between 1895 and 1899. The famine of 1899 was "the greatest in extent and intensity which India has experienced in the last 200 years." The famine relief organization in the provinces was found inadequate to cope with this emergency.⁸ The Famine Commission of 1901 found that "the steady application to agricultural problems of expert research is the crying necessity of the time," and recommended (i) strengthening of the staff of Agricultural Departments in all provinces, (ii) further legislation on the lines of the Punjab Alienation of Land Act to restrict transfers of land, and (iii) introduction of co-operative credit societies along German lines. The Co-operative Societies Act, 1904, and the expansion of the Imperial and provincial Agricultural Departments in 1905 were attempts to implement these recommendations.

On the whole, by 1905, a certain desire on the part of Government to promote agricultural improvements was discernible. The absence of precise data on which to work was, however, a main handicap. Various provincial Governments made isolated attempts to promote agricultural research and improvement; but the magnitude of the problem was so great that it was difficult for them to get down to essentials and they had neither the trained staff nor the organisation to carry into effect such recommendations as they were in a position to make.⁹ In the meanwhile, ten retired British officials and R. C. Dutt addressed a memorandum to Lord George Hamilton, the Secretary of State, in which they argued that the malady of Indian agriculture was more deep-rooted, and that at the back of it all was the land revenue system.¹⁰ This memorial evoked by way of reply Lord Curzon's famous Resolution of January, 1902, trying to vindicate Government's land revenue policy.

⁸ The Commission of 1901 emphasised the lack of real preparation. 'In no province were well considered programmes of public or village works ready at the beginning of the famine.' Thompson and Garratt, *Op. cit.*, p. 563.

⁹ Report of the Royal Commission on Agriculture in India, p. 29.

¹⁰ See Thompson and Garratt, *Op. cit.*, p. 565.

The demands made in the memorial were turned down, but this criticism of Government policy did hasten the introduction of reforms.¹¹ The passing of the Co-operative Societies Act of 1904, the expansion of the Imperial and provincial Departments of Agriculture in 1905, the constitution of the Indian Agricultural Service in 1906, the rapid expansion of irrigation in the course of the next fifteen years—all these are proof of the fact that the problem of Indian agriculture was by now assuming a new significance, that the emphasis was changing from palliatives like famine relief, “*takavi*” grants and revenue remissions to more positive measures. And yet, on the whole, the total impression made by these measures on the rural economy was small.

PROGRESS SINCE 1919

The Reforms of 1919 transferred to the Provinces the services of agriculture, co-operation, local self-government, public health and sanitation. Though even in regard to these transferred subjects the Central Government had certain powers of superintendence, direction and control, it was no longer permissible “to incur expenditure from Central Revenues on provincial subjects” except on agricultural research and the training of research workers in Central Institutes. The Provinces, on the other hand, had no real initiative as finance was not under their control. Therefore, except for a considerable extension of irrigation, little progress was noticed in agricultural improvement till the passing of the Government of India Act, 1935 which granted a measure of autonomy to the Provinces.

ROYAL COMMISSION ON INDIAN AGRICULTURE (1926-1928)

The first comprehensive survey of the various problems of agriculture in India was made by the Royal Commission on Agriculture in India. The Report of the Commission (1928) has rightly become the starting point for all further discussions on the subject. By its terms of reference, the Commission was asked to examine and report on the conditions of agriculture and rural economy in British India and to make recommendations for the improvement of agriculture and the promotion of the

11 *Op. cit.*

welfare and prosperity of the rural population. In particular, the Commission was to investigate : (a) the measures being taken for the promotion of agricultural and veterinary research, experiment, demonstration and education ; for the compilation of agricultural statistics ; for the introduction of new and better crops and for improvement in agricultural practice, dairy farming and the breeding of stock ; (b) the existing methods of transport and marketing of agricultural produce and stock ; (c) the methods by which agricultural operations are financed and credit afforded to agriculturists ; (d) the main factors affecting the rural prosperity and the welfare of the agricultural population.

The whole problem of land revenue and land tenure was however excluded from the scope of the Commission's work. This omission detracts considerably from the value of this otherwise comprehensive study. It is also illustrative of Government's piecemeal approach under pressure of events. For how could the promotion of the welfare and prosperity of the rural population be conceived without examining the basic land system of the country, that is the distribution of the ownership of land, the terms on which it is held or cultivated by the different rural classes, the relation of the cultivator to the landlord and to Government, and the whole system of land taxation ? The Commission however recognised clearly that "the problem of improving Indian agriculture was really the problem of improving Indian village life and that this must be studied as a whole."¹² Towards this end, the report contains valuable suggestions which have served as the basis of agricultural improvement since 1928.

One of the most important recommendations of the Commission was regarding the organisation of agricultural research. The object was "to promote, guide and co-ordinate agricultural research throughout India and to link it up with agricultural research in other parts of the British Empire and in foreign countries."¹³ Hitherto the various provincial Departments of Agriculture could undertake only limited activities due to lack of finance and technical personnel. Besides, there was no co-ordina-

¹² Sir John Russell: Report on the Work of the Imperial Council of Agricultural Research in Applying Science to Crop Production in India, 1939, p. 2.

¹³ Report of the Royal Commission on Agriculture in India, 1928, p. 48.

tion between the departments. The Imperial (now Indian) Council of Agricultural Research was designed to provide effective co-ordination and to act as a clearing house of information, not only in regard to research but also in regard to all general matters pertaining to the development of agriculture and animal husbandry. It would remain in close touch with provincial Departments of Agriculture and enlist the support and co-operation of Universities in the furtherance of agricultural research.

The recommendations of the Commission on sub-division and fragmentation of holdings, improvement of livestock, irrigation, marketing, co-operation, rural education and rural reconstruction, in general, aimed at bringing about "greater efficiency throughout the whole field of agricultural production" so as "to render the business of farming more profitable to the cultivator."¹⁴ The Commission emphasised the urgency of widening the outlook of the cultivator himself so that he may become not only a better instrument of production but also a better man. The responsibility of Government was also clearly defined: "We have no hesitation in affirming that the responsibility for initiating the steps required to effect this improvement rests with Government ; that the rural problem should be attacked as a whole, and at all points simultaneously ; that the responsibility for framing policy and combining the activities of two or more departments in order to give effect to their policy must remain that of Government and Government alone but that at the same time, success on a large scale can be rendered permanent only if the sympathy, interest and active support of the general public can be enlisted."¹⁵ This was an excellent enunciation of a new agricultural policy. But, events moved faster than the machinery of government.

DEPRESSION

The Great Depression started in 1929. Its effects were particularly serious in the primary producing countries though the industrial countries also suffered heavily. Industrial production could adjust itself relatively more easily to the new conditions. The fall in prices of industrial commodities was therefore compara-

¹⁴ Report, p. 672.

¹⁵ *Ibid*, pp. 672-673.

tively less and the process of recovery started earlier. Agricultural prices fell precipitately, and rural incomes suffered drastic reduction. Tables I and II show the variations in industrial and agricultural production during the period of depression and the variations in relative prices.

TABLE I
WORLD AGRICULTURAL AND NON-AGRICULTURAL PRODUCTION
(Average annual production in 1925-29=100)

Year				Index of Agricultural Production	Index of Non-Agricultural Production
1929	..	..	..	103	115
1930	..	..	..	105	106
1931	..	..	..	103	91
1932	..	..	..	102	79
1933	..	..	..	104	86
1934	..	..	..	104	98
1935	..	..	..	104	107
1936	..	..	..	107	121

TABLE II
PRICE MOVEMENTS OF RAW MATERIALS AND OF
MANUFACTURED GOODS
(1929=100)

Country			1932		1933		1934		1935		1936	
			June	Dec.	June	Dec.	June	Dec.	June	Dec.	June	
Belgium*	A	48	46	43	44	43	42	53	62	63
			B	69	67	65	65	62	59	64	69	69
Canada	A	55	52	59	60	66	66	67	69	68
			B	75	73	75	77	78	78	78	78	77†
Germany	A	66	66	68	68	69	70	69	71	71
			B	75	72	71	72	73	75	76	76	77
Italy	A	52	53	55	52	50	51	61	..	..
			B	69	70	64	64	61	61	67	..	..
Poland	A	62	63	58	62	59	56	55	55	56
			B	74	69	64	63	63	61	60	59	58
Sweden	A	81	81	79	79	79	84	84	86	84
			B	76	77	75	80	80	82	81	82	83
United Kingdom†	A	63	71	81	89	89	84	88	94	96
			B	91	93	94	94	94	95	95	96	98
U. S. A.	A	55	53	58	63	63	75	78	80	79
			B	73	71	72	78	76	83	85	96	85‡

A stands for raw materials, and B for manufactured goods.

* Figures for February and October instead of June and December.

† Base 1930=100.

‡ May, 1936.

¶ April, 1936.

The rise in prices of agricultural commodities after World War I had not been so great as that in industrial products. Further, many agricultural countries were debtor countries which had borrowed heavily in the past at high rates of interest and the payment of interest charges strained their balance of payments. The need for drastic remedial measures was widely recognised. The highly industrialised countries were faced with unemployment on an unprecedented scale. They took steps to arrest the fall in prices and to lessen the intensity of the depression. The measures taken included restrictions on imports, reduction in wages, slowing down of production, destruction of surpluses, price supports and various monetary and fiscal devices to prop up the economy. There was considerable rethinking on basic policies, and, in the United States, a series of bold reflationary measures were taken in hand as part of the 'New Deal'.

INDIA AND THE DEPRESSION

In India the depression had very adverse effects on the entire population as agriculture dominated the whole economy. As in other countries, the prices of farm products fell more than those of industrial products as shown in Tables III and IV.

The disparity between the fall in prices of agricultural products and in those of finished goods was also reflected in the price levels of our exports and imports. The former consisted mainly of raw materials and food products and the latter of manufactured goods.

As a result of the catastrophic fall in prices of agricultural products, the gross money incomes in this sector are estimated to have declined by about 50 per cent in 1933-34 as compared to 1929-30. This was not accompanied by a similar fall in the costs incurred by the agriculturist, for, while some elements in such costs are elastic, others such as interest charges and land revenue were more or less fixed and could not be brought down. The net money incomes of the farmer must, therefore, have fallen by more than 50 per cent. The payment of Government dues absorbed an increasing proportion of the farmer's depressed income. Although suspensions or remissions of land revenue were granted on a considerable scale, there was in this period a lowering of the farmer's standard of living and an increase in his indebtedness.

TABLE III
 INDEX NUMBERS OF WHOLESALE PRICES IN CALCUTTA
 (July 1914=100)

(Figures in brackets indicate percentage decline on the basis of September, 1929)

					Sept. 1929	Dec. 1930	Dec. 1931	Dec. 1932	Dec. 1933	Dec. 1934
Rice	..	..	..	..	124	93 (25)	74 (40)	56 (55)	74 (40)	66 (47)
Wheat	..	..	..	..	135	72 (47)	86 (36)	89 (34)	73 (46)	74 (45)
Tea	..	..	..	..	129	115 (11)	68 (47)	57 (56)	130 (*)	109 (16)
Oilseeds	..	..	..	..	175	99 (43)	80 (54)	78 (55)	77 (56)	100 (43)
Jute, raw	..	..	..	..	90	45 (50)	58 (36)	38 (58)	38 (58)	44 (51)
Cotton, raw	..	..	..	..	146	69 (53)	97 (34)	89 (39)	68 (53)	80 (45)
Hides and skins	..	..	..	..	109	79 (28)	61 (44)	59 (46)	62 (43)	49 (55)
Jute, manufactured	..	..	..	..	122	74 (39)	87 (29)	70 (43)	75 (39)	76 (38)
Cotton, manufactured	..	..	..	..	161	125 (22)	121 (25)	112 (30)	114 (29)	119 (26)
Metals	..	..	..	..	180	109 (16)	110 (15)	104 (20)	101 (22)	99 (24)
Sugar	..	..	..	..	164	128 (22)	147 (10)	139 (15)	124 (24)	122 (26)
All commodities	..	..	..	..	143	100 (30)	98 (31)	88 (38)	89 (38)	88 (38)

Review of the Trade of India, 1932-33. p. 8 and 1934-35.

Increase of about 1 per cent.

TABLE IV
PRICE LEVEL OF EXPORTS AND IMPORTS
(1927-28=100)

	Exports	Imports
1928-29	97.5	96.4
1929-30	90.2	93.2
1930-31	71.5	80.0
1931-32	59.2	71.7
1932-33	55.3	65.2
1933-34	53.5	63.5

Review of the Trade of India, 1936-37, Department of Commercial Intelligence and Statistics, India, p. 22.

GOVERNMENT MEASURES IN INDIA

The Government of India took the view that the Depression was due to world causes and that little could be done to counteract its effects. While other countries initiated an expansionist policy under state direction and control, the authorities in India adhered to 'orthodox' principles of currency and public finance and concentrated their energies on balancing the budgets and maintaining the exchange ratio. No systematic steps were taken either to increase exports or to decrease imports. The Ottawa Pact with its principle of Imperial Preference was more a concession to imperial policy than an effort to improve the export trade of India. The Mody-Lees Pact was in the nature of a political gesture of goodwill to Lancashire interests. The delinking of the rupee with gold brought little benefit as it was followed by the linking of the rupee to sterling at the old rate. The deflationary policy followed during the Depression resulted in a high rate of interest in the earlier stages and a larger outflow of gold thereafter. The international restriction schemes applied to India only in respect of tea and rubber; in jute, an effort was made to persuade the cultivator to restrict cultivation. In sugar, the minimum price

was guaranteed to sugarcane growers in the U.P. Barring these isolated items, no comprehensive scheme for improving agricultural incomes was taken in hand. The fixed charges of the farmer remained at the same high level and except in the C.P., no effort was made to reduce them by scaling down debts or by lowering rates of interest. The marketing and agricultural departments continued their work at the same old speed. Expenditure on social services like health and education and on development was curtailed. Instead of enlarging public works programmes, Government actually cut down such expenditure by some 25 per cent.

WORLD WAR II AND INDIAN AGRICULTURE

World War II involved for the belligerents a total mobilisation of resources, agricultural as well as industrial, towards the single end of military success. The European countries set about this objective with determination. In India, however, only piecemeal changes were introduced in this or that sector as circumstances pressed. The impact of war on India's agrarian economy was clearly visible in two spheres : crop pattern and prices. The war deprived India's staple commercial crops of their export markets. The commodities most affected were jute, cotton and groundnut, the decline in exports in each of these being of the order of 50 per cent and more in the course of three or four years.

The cultivators, on the other hand, with hopes of increasing prosperity as the war continued, were extending the cultivation of most of the commercial crops. The steep decline in exports against the expansion in production resulted in large surpluses of these commodities. With Japan's entry into the war, India lost her most important market for short staple cotton.

A decidedly opposite trend was noticeable in respect of food crops. India was called upon to supply large quantities of wheat to the Near East, as imports from other countries became difficult for lack of shipping space. The requirements of the military augmented the demand in India itself. As the war spread to the East, imports of rice from Burma ceased altogether. This resulted in a serious shortage of foodgrains.

Effect on Crop Pattern

These events necessitated a change in India's crop pattern in the direction of a large diversion from non-food crops to food crops. This process was influenced both by the regulatory measures of Central and State Governments and by changes in relative prices. The area under foodgrains increased from an average of 193 million acres for the triennium ending 1938-39 to the peak of 226 million acres in 1944-45, *i.e.*, by about 17 per cent, with a decline to 219 million acres in 1945-46. The average increase was about 7 per cent. While the wheat acreage was steady, the area under rice increased by 10.1 million acres or 13.7 per cent. The largest increase was under *kharif* cereals, *viz.*, jowar, bajra, maize, barley and *ragi* which increased by 19.6 million acres or 28.1 per cent. The area under gram increased by nearly 2 million acres. During the same period, the area under cotton declined by 9.8 million acres and the area under jute by 0.9 million acres, representing a decline of about 40 per cent and 28 per cent respectively. The area under groundnut and sugarcane showed some increase as after the Japanese occupation of the Dutch East Indies, the Phillipines and Malaya, the demand for Indian groundnut revived. Sugarcane production went up in response to rising internal demand.

Changes in output were much smaller than in acreage. The production of foodgrains during the period increased by 9 per cent, against a decline in the production of cotton and jute of 37 per cent and 26 per cent respectively. There is no positive evidence of a perceptible increase in agricultural production as a whole. According to official estimates, the total production of 19 principal agricultural commodities, expressed as a percentage of the average during the base period 1934-35 to 1938-39, showed a fall to 82.58 in 1945-46. For the eight commodities comprised in the foodgrains group, the index was 92.49.¹⁶ Except for the years 1942-43 to 1944-45, the general trend appeared to be downwards.

Price Trends

The index numbers of wholesale prices of principal crops are given in Table V. The price movements as indicated were

¹⁶ Estimate of the Ministry of Agriculture, Government of India.

favourable to a substitution of food crops for non-food crops, but, in the general upward trend, there were erratic relative changes from time to time. The relationship between shifts in relative prices and production trends within the group of agricultural commodities since 1939 has been obscured by the upward movement in the general level of prices and the working of regulatory measures for price adjustment.

TABLE V
INDEX NUMBERS OF WHOLESALE PRICES IN INDIA
DURING WORLD WAR II

(Week ended 19th August, 1939=100)

			1939-40	1940-41	1941-42	1942-43	1943-44	1944-45	1945-46
Rice	..	..	114	130	164	232	703	334	329
Wheat	..	..	137	140	181	241	350	383	400
Raw Cotton	..	..	132	125	144	162	223	172	168
Raw Jute	..	..	197	113	137	151	200	274	199
Groundnut	..	..	109	87	115	187	284	229	239

A significant feature of the price changes in the war period was an improvement in the terms of trade between agriculture and industry. By the end of the war, the general index of prices was close to 250. The index for agricultural commodities had risen to about 270, while that of manufactured articles was about 240. After 1945-46 the prices of agricultural commodities rose relatively less than those of manufactured goods. Table VI shows the comparative position.

In evaluating the effects of the rise in agricultural prices on the rural community, the background of the agricultural situation in the inter-war period should be kept in mind. The disastrous effects of the earlier depression on agricultural prices have already been indicated.¹⁷ While it is gene-

¹⁷ The view was widely held that for the ten years or so before 1939, the Indian agriculturist had a 'raw deal' owing to the drop in prices of agricultural produce since the slump of 1929, that he had been selling his crops below the real cost of production and that he had greatly deteriorated in his finances and his scale of living. This had been to some degree recognised by the Government of India in imposing an import duty on wheat in 1930 and in giving protection to the sugar industry in 1932. Sir Henry Knight: Food Administration in India, 1939-47, pp. 34-35.

TABLE VI
 INDEX NUMBERS OF WHOLESALE PRICES IN INDIA
 (Average of Weeks)
 (Year ended August 1939=100)

Group of Articles	1947-48	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	March 1955
Food Articles	..	306.1	382.9	391.3	416.4	398.6	357.8	384.4	339.8
Industrial Raw Materials	..	377.5	444.8	471.7	523.1	591.9	436.9	467.7	436.2
Semi-manufactured Articles	..	261.6	327.3	331.6	348.9	374.4	343.8	359.2	350.3
Manufactured Articles	..	286.4	346.1	347.2	354.2	401.5	371.2	367.4	377.3
Miscellaneous	..	456.2	525.2	570.7	707.4	721.6	614.1	686.6	612.4
General Index	..	308.2	376.2	385.4	409.7	434.6	380.6	397.5	377.4

Report on Currency and Finance for the years 1952-53 and 1954-55, Reserve Bank of India, pp. 118 and 125 respectively.

rally true that a period of high agricultural prices raises rural incomes the benefits are not evenly spread.

The fall in the purchasing power of the rupee in the war and post-war period reduced the real burden of rural debt. Even here, the larger landholders benefited more than the rest. The Review of the Co-operative Movement on the credit side indicated that "the main effect of the increase in agricultural prices has been to improve the repaying capacity of the borrower and not so much to reduce his need for fresh finance which, on the other hand, has risen with the cost of cultivation and maintenance."¹⁸ The materials required for farming operations were in short supply; costs of cultivation rose progressively; while rural wages rose only moderately.

It is probable, on the whole, that the bulk of the gain accrued to large landholders and traders in rural areas. The lesson of wartime experience, clearly, is that broad-based rural prosperity is not a matter of relative price and income adjustments; such prosperity can come only from increased productivity.

EFFECTS OF PARTITION

The partition of the country in August, 1947 was a violent shock to the economy. It aggravated the disequilibrium brought about by the wartime dislocation. Apart from the immediate and unprecedented movement of displaced persons from one side of the border to the other and the consequent disruption of economic life over wide areas, the most serious effect on the Indian Union was a relative weakening of the agricultural potential. The area of pre-partition India was 1,581,000 square milés. Of this, 1,220,000 square miles are now in the Indian Union, and 361,000 square miles, i.e., 22.8 per cent of the area in Pakistan. Of the 417 million population in undivided India, 337 million came under the Indian Union and 80 million or 19.2 per cent of the total under Pakistan. This realignment of area and population raised the density of population per square mile in India to 276 as compared to 264 for undivided India. This by itself is not of any great significance, for higher density per square mile does not necessarily indicate a greater pressure on resources. It

¹⁸ Review of the Co-operative Movement in India, 1939-46, Reserve Bank of India

is significant however that, of the total irrigated area of 70 million acres in undivided India, Pakistan obtained 22 million acres which works out at about 32 per cent of the total. The proportion of irrigated area to net area sown worked out at 48 per cent in Pakistan, and 20 per cent for the Indian Union.

The following table shows the yield of principal crops in the two Dominions.

TABLE VII
YIELD OF PRINCIPAL CROPS IN INDIA AND PAKISTAN*

Crops						(per acre in lbs.)	
						Annual average 1943-44 to 1945-46	
						Indian Union	Pakistan
Rice	..	..	..	..	..	745	868
Wheat	..	..	..	..	..	582	730
Cotton	..	..	..	..	..	78	172
Jute	..	..	..	..	..	839	1,275

* Estimates of Area and Yield of Principal Crops in Undivided India, 1936-37 to 1945-46, Directorate of Economics and Statistics, Ministry of Agriculture, Government of India, June 1949, pp. 22 and 25.

The total area under rice in undivided India was about 81 million acres. Of this about 23 million acres or 28 per cent was secured by Pakistan. Of the total area of 35 million acres under wheat, Pakistan secured 10·5 millions or 30 per cent. In both these respects, therefore, the Indian Union was left relatively poorer. The same was true of cotton. The cotton growing area transferred to Pakistan was 23 per cent of the area in undivided India and this area grew better varieties of cotton. As much as 76 per cent of the total area under jute lay in Pakistan. The Indian jute industry therefore had to depend largely on the imports of raw jute from Pakistan. These statements of 'gains and losses' in productive resources in agriculture in the two Dominions only indicate the essential inter-dependence of the two economies. India is

certainly more advantageously placed in respect of industrial development. Political separation notwithstanding, it is important, therefore, that the economic ties between the two countries are maintained and strengthened. At any rate, in the immediate transition period, partition made India a large importer of food and raw materials. The first priority in India's economic planning for the next few years has, therefore, to be on making good this deficiency.

FOOD PROBLEM

The formulation of agricultural policy during the war period and its subsequent development in precise terms in the post-Independence period centred round the food problem. Even prior to the war, India was slightly deficient in food supply and she had to import about a million tons of rice from Burma. With the cessation of these imports in 1942, the food situation worsened markedly. There were transport bottlenecks which caused acute shortages in certain parts of the country. With the pressure of war demands on the one hand and growing difficulties, on the other hand, in mobilising available supplies because of hoarding by producers and traders, prices rose sharply. The Bengal Famine to which reference has been made earlier indicated a complete breakdown of the market mechanism and a failure of the administrative machinery to provide a working alternative.

FOOD POLICY

The Government had no well-thought policy to meet the emerging situation. Nor was there an efficient administrative machinery to implement a policy. The years 1942 and 1943 saw some haphazard measures of control in certain regions. Though the Government of India promulgated in May, 1942 the Foodgrains Control Order which gave power to control the possession, movement, etc., of foodgrains, its application was left to the Provinces and in the absence of any over-all plan for the movement of surpluses to deficit areas, the provincial restrictions on export prevented normal trade transactions. Meanwhile the war situation was getting worse and the problem of feeding the people could no longer be regarded as a local matter. In these circumstances, Government of India established a Food Department at the Centre and held the first All-

India Food Conference. As a result, a plan for moving foodgrains from surplus to deficit areas was proposed, but it could not, owing to provincial delays, be set in motion to be of timely aid to Bengal when the extent of the famine became known a few months later in 1943. The rush of events, however, compelled action. The Foodgrains Policy Committee appointed in July, 1943 laid down the lines of policy which thereafter guided the Government of India in food administration. ..

The Foodgrains Policy Committee came to the conclusion that the crisis did not derive from an absolute decline in the volume of internal physical production but was the result of a complex of circumstances. The report summed up the situation as follows :

The food crisis was accentuated on the *supply side*, (i) by the fact that certain normally deficit areas (Bombay and Malabar Coast) were deprived of a disproportionately large part of their normal supplies by the cutting off of Burma imports, (ii) by the reduction of normal supplies (and the destruction of stocks) in the normally surplus districts of Bengal due to the cyclone of October, 1942 and by the widespread disease in the *Aman* paddy crop of Western Bengal. It was accentuated on the *demand side*, by (i) the combination of an adverse supply situation in Bengal with an adverse psychological situation due to proximity to the war zone, (ii) a diminution in the marketable surplus through increased holding and/or increased consumption by the cultivator, (iii) probably some increase in *per capita* consumption by those in receipt for the first time of higher money incomes, (iv) a decline in the absolute size of the rice carry over, (v) an increased demand, which could not always be satisfied and *therefore* exerted an altogether disproportionate influence on prices, for personal and family 'security' reasons.¹⁹

The recommendations of the Committee fell under five main heads : (i) increase in available supplies, (ii) improved procurement machinery, (iii) measures to secure a more equitable distribution of supplies available, *i.e.*, the extension of rationing, (iv) a general extension of the principle of statutory price control

¹⁹ Report of the Foodgrains Policy Committee, 1943, p. iii.

and (v) an overhaul of the machinery of administration.²⁰ The emphasis was on the inter-relationship of all these remedial measures and their simultaneous application.

The Food Production Conference (April, 1942) drew up a plan for increasing the production of foodgrains and available supply and recommended the following measures : (i) an increase in the area under food and fodder crops by bringing (a) new land including fallow land under cultivation, (b) double cropping and (c) diverting land from non-food crops to food crops; (ii) an increase in the supply of water for irrigation by the improvement and extension of existing irrigation canals, construction of additional wells, etc.; (iii) extended use of manures and fertilizers; and (iv) an increase in the supply of improved seeds. The modest target suggested by the Conference was a 4 per cent increase, 7 million acres in the acreage of food crops and an additional 1·7 million tons of food.

Thus was initiated the Grow More Food Campaign. Although this was a promising development, and considerable sums were allocated to it, there was little popular enthusiasm behind it. In any case, no quick or spectacular results could be expected, since the scope for an increase of food production through increased acreage was small, and more intensive methods take time to be widely adopted.

An important announcement of policy was made on January 21, 1946. "The all India policy is to promote the welfare of the people and to secure a progressive improvement in their standard of living. This includes the responsibility for providing enough food for all, sufficient in quantity and of the requisite quality. For the achievement of this objective, high priority will be given to measures for increasing the food resources of the country to the fullest extent, and in particular to measures designed to increase the output per acre and to diminish dependence on the vagaries of nature. Their aim will be not only to remove the threat of famine, but also to increase the prosperity of the cultivator, raise the levels of consumption and create a healthy and vigorous

population.”²¹ The content of this comprehensive policy was indicated in ten “cardinal objectives” which included the growth of more food, the production of more raw materials for industry, assured markets for agricultural produce at prices remunerative to the producer and fair to the consumer, fair wages for agricultural labour and a higher standard of rural living, development of cottage industries on scientific methods and ensuring a fair distribution of the food produced. To achieve these ends, various measures were suggested. However, the Centre continued to rely on the Provinces for implementation and follow-up action.

In October, 1946, an Advisory Planning Board was set up. The report submitted by it early in 1947 suggested that in cereals, an additional annual production of four million tons was a reasonable target to be obtained by 1951-52 and that each Province and State should make plans for its share of such targets. The need for keeping a balance in the cultivation of food crops and cash crops was also stressed.

In September, 1947, the Second Foodgrains Policy Committee reviewed the food position again and observed that : (i) The GMF efforts between 1943 and 1947 were inadequate and in most areas lacked the necessary vigour and drive and the campaign had not produced the results aimed at. (ii) The restriction of area under jute and cotton had not led to corresponding increase in the production of substitute food crops ; the Central Government should immediately consult the Provinces and States with a view to examining the advisability of continuing the policy of restriction of area under cash crops in favour of food crops. (iii) If definite results are to be achieved, a radical revision of food production policy and machinery is called for. The Committee recommended that the country should aim at the achievement of an additional production of ten million tons of foodgrains within the shortest possible time by the following methods : (i) extension of irrigation by 19 million acres within 10 to 15 years through the multi-purpose projects under contemplation by the Central Water Ways Commission. This was expected to produce 4 million additional tons of foodgrains ; (ii) implementation by

21 Press Note issued by the Government of India.

the Provincial Governments of Five Year Food Production Plans expected to secure an increase in food production of about 3 million tons during the course of next five years ; (iii) reclamation by the Central Government of sufficient acreage of cultivable waste lands resulting in an additional production of 3 million tons of food-grains. All these measures were of a long-term nature. In the meanwhile, the country had to depend upon substantial imports of foodgrains.

PRICE TRENDS

Meanwhile, prices continued to rise. The level of food prices played a key role in determining the cost of living and affected indirectly the entire structure of prices and costs. The persistent shortages of food and raw materials and the continually upward trend of the general level of prices necessitated the continuance of a net-work of controls. An attempt was made in 1947 to relax control in the hope that the stimulus of higher prices would lead to increased production and a larger flow of supplies to the market. The index of wholesale prices rose by 30 per cent as a result of decontrol. The expectations regarding production did not materialise and it became necessary to reimpose controls within less than a year of decontrol.

After the reimposition of controls in 1948, a measure of stability was attained until the devaluation of the rupee along with several other currencies in September, 1949. The anti-inflationary programme taken in hand soon after devaluation was again a stabilising factor. However, the out-break of the Korean War led to a general rise in prices. Although steps were taken to prevent money incomes from rising in consequence of the rise in prices of exports, the economy was once again subjected to serious inflationary strain.²² The subsequent decline in prices was partly a corrective to the earlier speculative trend, and partly a consequence of the real change in world demand and supply conditions and of the adoption of disinflationary measures by the Government.

PROGRESS OF GMF CAMPAIGN

From April, 1949 onwards, there was an acceleration of the GMF campaign with a view to attaining self-sufficiency in food-

²² Report on the First Five-Year Plan, p. 178.

grains by 1952. The trend of agricultural production is given in Table VIII. The statistical data available do not reveal any marked trend upwards till 1952. The estimates of yield are far from satisfactory. The additions to the reporting area may have accounted for the small increase noted. In terms of the quantities procured by Government for internal redistribution, there was also no improvement.

TABLE VIII
INDEX NUMBERS OF AGRICULTURAL PRODUCTION
IN INDIAN UNION : 1939-40 to 1948-49

(Base : 1936-37 to 1938-39=100)

1939-40	..	..	..	..	..	97.7
1940-41	..	..	..	..	..	95.7
1941-42	..	..	..	..	..	92.8
1942-43	..	..	..	..	..	101.0
1943-44	..	..	..	..	..	103.8
1944-45	..	..	..	..	..	105.3
1945-46	..	..	..	..	..	93.1
1946-47	..	..	..	..	..	96.1
1947-48	..	..	..	..	..	106.5
1948-49	..	..	..	..	..	104.4
1949-50	..	..	..	..	..	108.4

The GMF campaign did not achieve the results expected of it. Its scope was conceived narrowly, and its objectives were modified from time to time. The administrative arrangements were made on a temporary basis, and there was no extension agency to promote a movement for better farming. The year 1951 opened with a higher level of prospective food deficit than ever before which necessitated imports in 1951 and 1952 of 4.72 million and 3.90 million tons respectively. In the altered conditions, reliance could no longer be placed on diversion of areas from non-food crops to food crops. The diminution in the acreage under cotton and jute resulted in shortages of essential raw materials.

The textile mills in India were not able to work to capacity as their actual requirements were much larger. Government therefore had to change their policy and stimulate the production of cotton as well as jute side by side with the production of foodgrains. It was realised that while self-sufficiency in foodgrains, cotton and jute is not a necessary condition of maximising the economic return from cultivation, it was desirable for an agricultural country like India to step up substantially the production of these crops in order to secure a greater measure of balance in the economy. It was also obvious that such an advance towards balanced crop production could not be secured except through an increase in productivity per acre.

DECONTROL

As from 1951-52, the GMF campaign was merged in the plan for agricultural development which was given first priority. At the end of the first three years of the Plan, the Indian economy had been restored to a measure of equilibrium. Agricultural production recorded a big increase in 1953-54. The progress both in terms of production and of prices is indicated in Tables IX and X.

TABLE IX
INDEX NUMBERS OF AGRICULTURAL PRODUCTION

(Base : Agricultural year 1949-50=100)

Crop					1950-51	1951-52	1952-53	1953-54
Rice	..	..	..	..	87.9	90.1	96.8	118.6
Wheat	..	..	..	..	101.1	93.9	112.7	120.0
<i>Total Cereals</i>	..	..	..	..	102.0	95.1	114.5	120.6
Pulses	..	..	..	..	91.7	90.3	98.8	112.0
<i>Total Foodgrains</i>	..	..	..	..	90.5	91.1	101.1	119.1
Oilseeds	..	..	..	..	98.5	97.5	91.9	103.7
Cotton	..	..	..	..	110.7	119.2	121.0	151.8
Jute	..	..	..	..	106.3	151.4	148.4	100.0
Plantation Crops	..	..	..	..	104.0	109.4	115.7	104.0
Sugarcane	..	..	..	..	113.7	122.8	101.6	89.5
<i>All Agricultural Commodities</i>	..	..	..	..	95.6	97.5	102.0	114.3

TABLE X
INDEX NUMBERS OF PRICES OF FOOD ARTICLES

Group and Commodity			1-4-51	21-7-51	19-7-52	18-7-53	17-7-54
Food Articles	..	..	414.1	409.0	373.4	406.6	358.6
I Cereals	..	..	496	482	461	483	403
1. Rice	..	..	553	515	534	538	481
2. Wheat	..	..	591	540	549	609	434
3. Jowar	..	..	307	328	230	243	200
4. Bajra	..	..	245	245	245	328	237
II Pulses	..	..	505	496	509	500	293
1. Gram	..	..	391	371	442	413	253
2. Dal (Arhar)	..	..	774	804	645	686	373

Five Year Plan Progress Report for 1953-54, September 1954, Planning Commission, Government of India, p. 52.

The move towards decontrol started in June 1952 with the abandonment of statutory rationing in Madras. The futility and irksomeness of controls were a recurring theme of discussions in 1952 and 1953, and although there was within Government and outside considerable opinion in favour of the continuance of controls, the easing of the food situation since 1953-54 swung the balance decisively in favour of decontrol.

With food prices declining, Government stepped up the rate of investment expenditure in the Plan. Simultaneously, it announced certain support prices. No steps were taken in this period to build up buffer stocks. This, as subsequent events have shown, was a serious omission.

The declining phase in agricultural prices which started in May 1954 lasted only upto the middle of 1955 after which there has been again a further rise in the price of food-grains. Part of this rise has been healthy, as prices had fallen too low earlier. But, the situation caused anxiety, and, in June 1957, a Foodgrains Enquiry Committee under the chairmanship of Shri Asoka Mehta was appointed to go into the question.

REVIEW OF WARTIME CONTROLS

Food controls of the war-period represent an important stage in the evolution of policy. It was a change forced by circumstances, but it involved, nevertheless, as the policy statement of 1946 mentioned earlier indicated, a new orientation in policy. The Defence of India Ordinance, under Section 42 of the Government of India Act, subsequently replaced by the Defence of India Act, 1939, provided the Central Government the legal basis for the system of controls on commodities, particularly foodgrains. The Act empowered the Central Government to make such rules as appeared to it to be necessary or expedient for securing the defence of British India, the public safety, the maintenance of public order or the efficient prosecution of the war or for maintaining supplies and services essential to the life of the community. Rule 81 under this Act, for the general control of industry, etc., provided for (a) regulating production, treatment, keeping, storage, movement, transport, distribution, disposal, acquisition, use or consumption of articles or things of any description whatsoever, (b) controlling the prices or rates at which articles or things of any description whatsoever may be sold, (c) requiring the keeping of books, records, etc. It was under this very comprehensive Rule that most of the regulations regarding food supplies were made and controls enforced.

After the attainment of Independence and the acceptance of the new Constitution, these regulations gained a new significance. They provided a more positive approach to current problems and the question then was how to adapt them to the needs of purposive planning. The broad phases of policy were the control of prices, procurement and rationing and measures for increased production. The final phase of the policy was an integrated production and distribution programme with other economic measures necessary for maintaining prices at economic levels.

In the first phase of the policy on control of prices, there were six Price Control Conferences till September, 1942. The last conference laid down the first scheme for centralised purchase of foodgrains which was the origin of the 'Basic Plan' adopted later by the Government of India and by the Provincial Govern-

ments. This recommendation was a step in advance since it implied a clear recognition of the fact that prices could not be controlled unless distribution as a whole was controlled.

Increased Production

The food crisis in 1943 and the work of the Famine Inquiry Commission brought out the fact that the food problem could not be solved without a co-ordinated approach on the part of the Centre and Provinces. The agricultural production programmes with defined targets of achievement constituted an important plank in this policy. Simultaneously, the system of procurement and rationing was introduced to bridge the gap in food supply in the interim period, until self-sufficiency was reached.

Procurement

In peacetime, the Government of India used to purchase foodgrains for the defence forces through agents operating in the surplus Provinces and States. This quantity was a very small proportion of India's total crop production. But during the war, foodgrains had to be procured by Government not only for the defence forces but for the urban civilian population as well. It was the Third Food Conference which made it clear that if the 'Basic Plan' was to operate successfully, every Province, surplus or deficit, must have a procurement agency which would secure from each cultivator the maximum possible amount of his crop for the Government. However, several of the Provincial Governments considering the number, magnitude and the complexity of the transactions intervening between the grower and the consumer hesitated to accept direct responsibility for procurement. This hesitancy was particularly noticeable in the permanently settled areas where it was felt that the introduction of the scheme would require recruitment and training of large numbers of personnel who would be lacking in the personal influence and local knowledge possessed by the existing agencies. It was felt that direct procurement would be resented by the peasantry. Inevitably as long as possible, procurement was effected through existing trade agencies at varying stages of the movement to the consumer. Only the Provinces of Bombay and Madras and the States of Travancore and Cochin adopted a fairly rigorous system of procurement—direct from the grower.

In some Provinces or States, the task of procurement was left to trade agencies, which were required to surrender to Government at a stated price a certain proportion of their purchases; in others, all sales had to be made to governmental agencies, although there was no obligation on the part of the producer to supply any prescribed quantities.

Rationing

Though practically every State Government accepted the need for rationing in towns, it was not until 1945 that all the States fell in line. There were two main types of rationing, statutory and non-statutory. Under the former, the population was enumerated and every ration card holder was entitled to receive specified rationed articles at specified prices. The breach of the statutory order was punishable by law and the import of food by a consumer into a rationed area was prohibited. The quantities procurable under this system were fixed from time to time, and Government held itself responsible for providing this amount. Non-statutory rationing which was intended for rural areas was not so complicated. There was no prohibition of private imports but ration cards were issued to non-producers and producers whose production was judged to be below the needs. These entitled the possessors to purchase rations on a fixed scale from a licensed retail dealer. There was no legal obligation on the part of the authorities to supply this ration and in theory the Government might vary or stop the distribution. A third method of Government distribution was 'controlled distribution' which applied in some country districts. Under it, family ration cards were issued to needy consumers for priority supplies by private traders in amounts varying with the supplies that might be available at the time.

The total rationed population in the Indian Union in 1950 was 113·8 million out of a total population of 337 million. Of the total of 113·8 million rationed population, about 39·3 million were subject to statutory rationing, while the remaining 74·5 million came under non-statutory rationing. The normal adult ration was 1 lb. a day. Children between 2 and 12 received half the ration and manual workers received an additional 50 per cent. These obligations caused a continuous strain on the system, as the corresponding procurement arrangements were not such as to ensure the needed supplies coming into Government's hands.

Problems of Control

In a country of the size and diversity of India with a system of production involving millions of small units, the task of collecting the surpluses of individual producers and distributing them equitably over the consuming population is by no means simple. Moreover, controls in one line produce reactions in different parts of the economy so that success depends not merely on the efficiency of a particular control or set of controls, but on the orderly functioning of the whole net-work of controls. The division of responsibility between the Centre and the States also creates problems. The Centre undertook the purchase of foodgrains from abroad and worked out in consultation with States the implementation of the 'Basic Plan'. Each State provided the Centre with estimates of production and consumption and the extent to which it was surplus or deficit. The surpluses tended to be understated and the deficits were often exaggerated.

These controls involved the maintenance of numerous consequential controls and the undertaking of a large variety of functions by the Centre and the States. So great was the volume of transactions and so varied the operations involved that the administration of food control has rightly been called the biggest enterprise ever undertaken by the State in India. In 1949, the approximate value of foodgrains handled by the Centre and the State Governments together was over Rs. 440 crores and the cost of staff employed by them amounted to nearly Rs. 50 crores.

Criticism of the administration of these controls should be tempered by the recognition of the magnitude of the problem. Control is not palatable to either the consumer or the producer. The system suffered for lack of clear definition of the purposes underlying ; it also involved waste and inefficiency. Nevertheless, it did serve to keep prices in check and to distribute supplies rather more equitably than would otherwise have been possible. The fact is that some of the weaknesses of the system were due not to an excess of controls but to their partial coverage and their unco-ordinated character. Basically, the food problem was but a manifestation of the incapacity of the productive system in India to adapt itself to the requirement of a growing population. Though

the first phase of the campaign was in the nature of a short-term expedient to meet an emergency, the long-term aspect of augmenting the food resources of the country and evolving a reasonably balanced price-structure came to be recognised by and by as essential ingredients of developmental policy.

“Taken as a whole, the food crisis in India showed the capacity of the traditional administrative system to improvise and to expand to meet unexpected emergencies, and the willingness and the ability of the Indian public to accept unusual and inconvenient measures when such were necessary.” This has been the conclusive view of a dispassionate study of food administration in India during the war period.²³ And, it is this aspect rather than the inevitable drawbacks of an insufficiently co-ordinated system which deserves prominence in any unbiased appraisal.

With the initiation of the First Five-Year Plan, food policy—and agricultural policy in general—has come to be viewed in the broader context of the development of the economy as a whole. The emphasis is, therefore, as much on a diversification of the economy as on development of agriculture as such or on the improvement of conditions in rural areas. This involves an integrated view of the economy as a whole and raises problems which will be discussed in later chapters.

²³ That there were exceptions to this was proved by the Bengal famine. But it is true to say that the really remarkable thing about Indian food administration from 1939 to 1947 was that there was only one famine. The crop failures in southern India in 1943, and in various parts of the country in 1946 and 1947, might easily have developed into disasters but for the energetic action taken by the Government of India and the provincial and state Governments concerned. That the food crises of 1946 and 1947 were safely passed is a proof that the policy laid down in 1943 by the Foodgrains Policy Committee was sound and its practical application saved India. Sir Henry Knight: *Food Administration in India, 1939-47*, pp. 274-75.

CHAPTER VII

CROP IMPROVEMENT AND TECHNICAL RESEARCH

CROP IMPROVEMENT

A basic objective of economic policy for agriculture is to increase productivity and this depends upon application of scientific research to all agricultural operations. The main determining factors are : (a) better varieties of crops through the use of improved seeds, (b) better control of pests and diseases, (c) better control of water supply for crops, (d) prevention of soil erosion, (e) better use of manures and fertilisers, (f) better tools and implements, (g) better systems of cropping, in particular, better rotations and the use of more fodder crops with a view to obtaining more farmyard manure. These factors have to be viewed together in any effort designed to increase production. Even the limitations of season and climate can be overcome in some measure by selecting suitable techniques.¹

In the post-war period there has been increasing appreciation of the dangers to crop production which result from negligence or ignorance of the factors mentioned above. This has found expression in legislative enactments for securing better standards of cultivation. Some of these enactments are reviewed below.

IMPROVED SEEDS

The most outstanding achievement of modern agriculture is the production of improved varieties of seed for different crops. In India the cultivator is generally well aware of the importance of good seed ; at least in the matter of improved seeds, the apathy of the cultivator cannot be said to be the reason for the comparatively small area under improved varieties.

The Indian Council of Agricultural Research has devoted considerable attention to the introduction of improved varieties

¹ Factors Affecting Rice Production, F.A.O. Agricultural Development Paper, No. 45, p. 27.

of seeds. But, the effort has been mostly confined to cash crops such as cotton, sugarcane, etc. With the exception of wheat, the main cereals—rice, millets and pulses are still grown chiefly from the indigenous non-improved varieties. As much as 80 per cent of the area sown under sugarcane and as much as 50 per cent under jute falls under the category of area under improved seeds. It is estimated that normally 5 to 10 years is the time required for placing the entire area of a crop under improved varieties through organised multiplication and distribution of seeds. But the great handicap has been that improved seeds generally require a more liberal manurial treatment than the familiar varieties. Further, there is difficulty in obtaining adequate supplies of certified seeds for lack of an effective seed trade to take up new varieties, multiply them and distribute them to cultivators at reasonable prices.² If such an agency could be built up, the technological possibility of a five to ten per cent increase in yields is indicated. The Extension Services now in operation and their expansion to cover all the villages in India in the Second Five-Year Plan will make rapid progress possible in this direction. So far, only 20 per cent of the cultivated area is estimated to be under improved varieties.³

From the point of view of the nutritional needs of the country, much more than what has hitherto been done is necessary in regard to food crops. The Planning Commission has stressed this aspect of the problem. The appointment of a Nutrition Expert to act as a liaison officer between the work of the Nutrition Laboratory at Coonoor and the Agricultural Research Stations at Delhi and in the States has been a step in the right direction. The Russell report commenting on this need observed : "It is particularly important that the work on human nutrition should not become diffuse. Everything else should be subordinate to the two vital problems—what are the deficiencies in the village dietary and how best they could be overcome." The Nutrition Laboratory has done useful work since, in the investigation and publication of the nutritional standards of the Indian population as well

² Sir John Russell : Report on the Application of Science to Crop Production in India, 1939, p. 57.

³ Agricultural Legislation in India, Volume III, Agricultural Production and Development, 1952, p. ix.

as the qualities of the diets consumed in different regions. Of equal importance in this respect is more work in connection with growing of vegetables and fruits. These are not consumed in India in adequate quantities mostly because they are beyond the reach of the average person. Better facilities of transport and better preservation techniques are of special importance in this connection.

Legislation and Propaganda

Though arrangements for distribution of improved seeds, sometimes treated with sulphur to prevent misuse, have been made in some States, only in the Punjab has the Government assumed responsibility for supplying improved seeds to the cultivators through authorised agents. The Punjab Improved Seed and Seedlings Act, 1950, makes it incumbent on the cultivators in any notified area to use only the improved variety sold by authorised agents on behalf of the Department of Agriculture. Such agents can stock no other variety of seed except the improved one. The officers of the Department are empowered to enter any field for the purpose of ascertaining whether improved varieties are being grown or not. As a result, the area under improved varieties in the Punjab under all crops is relatively large. In other States, steps have been taken to encourage the use of improved varieties by the distribution of better yielding strains at reasonable prices. The State Plans provide for about 3,000 seed multiplication farms with a total area of about 93,000 acres. Every national extension service block is to be served by a seed farm and a seed store. The proposals include the setting up of seed testing stations for ensuring quality. The Planning Commission has reviewed the progress so far achieved and has again stressed the need for improvement in the system of seed multiplication and distribution. The problem is one of evolving varieties of seed suitable for the different climatic and ecological conditions in the various regions of India and of making such seed available to the farmer on a dependable basis.

CONTROL OF PESTS AND PLANT DISEASES

Insect pests, fungoid diseases and weeds damage the crops and nullify the benefits of other improvements such as better seed and better manure. The evil has shown signs of spreading with

improvement in transport. The International Conference, organised by the Food and Agriculture Organization (1947), considered that in tropical and sub-tropical countries, where climatic conditions are conducive to a multiplication of pests, the losses in storage alone might be estimated at about 10 per cent.⁴

Some amount of pioneering work has been done by the State Agricultural Departments and the Indian Agricultural Research Institute in the study of life habits of important pests and the methods of control of certain diseases. Several measures have been taken on the basis of research for the control of plant diseases and fungi by propaganda and persuasion through co-operative and other rural agencies, and significant results have been achieved in the matter of locust control. But, far greater effort is required for successfully eradicating pests and diseases.

Legislative Measures

Adoption of resistant varieties, changing of the soil conditions or time of cultivation and destruction of the pests by chemical or biological means are the chief methods of fighting this evil. Having found by experience that this problem could not be left entirely to voluntary action, the States have taken powers to localise any fungus or disease. The main feature of the various State legislations is that every landholder in the notified area is obliged to undertake measures as directed by the authorities. In case of non-compliance, the latter can execute the requisite measures and recover the cost from the landholder along with land revenue.

The Plant Protection Organisation at the Centre consists of a Directorate with the Plant Protection Adviser as its head and three main divisions: (i) Entomology, (ii) Plant Diseases and (iii) Quarantine. The Directorate advises the States on the control of various diseases and pests and helps them in setting up plant protection organisations in their areas. Locust control work is also its responsibility. The primary function of the PPO at the Centre and in the States is to fight outbreaks in epidemic

⁴ See Report on the First Five-Year Plan, p. 263.

form. A secondary function is the investigation of plant diseases and pests and the prescription of measures for their destruction. The methods of control adopted for preventing damage to crops have been classified under four categories : (i) quarantine, *i.e.*, the prevention of entry of plant and animal pests from countries outside India, (ii) biological control, *i.e.*, employment of an insect to check the development of another insect, (iii) cultural methods, *i.e.*, variation in cultural practices such as the introduction of resistant varieties of crops, changes in rotation, time of sowing of plant, deep and shallow cultivation, giving or withholding of irrigation, etc., and (iv) chemical treatment. In recent years the use of insecticides, particularly, D.D.T., B.H.C. and other similar chemicals has increased considerably and provision has been made for the manufacture of these chemicals in the country. New techniques of locust control have also been devised.

IRRIGATION

The most important factor for improving yield⁵ is adequate and timely water supply. Out of about 313 million acres of net area sown in 1953-54, the total irrigated area was 59·8 million acres or 19 per cent. Thus, more than four-fifths of the cultivated area is dependent on the monsoon rains. Even in irrigated areas the supply is often defective with the result that delayed plantings cause losses amounting to 20 or 30 per cent of normal yields.⁵ In regions of heavy rainfall, absence of proper drainage facilities causes erosion of soil. In areas of low rainfall, yields are kept down for want of sufficient nutrients in the soil ; manures and fertilisers can do little good in the absence of adequate water supply.

A major requirement for increasing crop production in India is irrigation. But provision of irrigation facilities is only a part of the problem. "When a great dam or barrage has been opened with much ceremony and flourish of trumpets, it must always be borne in mind that the problems still remaining are greater than those already overcome because they are more continuous, more subtle and much less under the control of the experimenter." There are

⁵ Agricultural Legislation in India, Volume III, Agricultural Production and Development, p. viii.

problems of selection or if necessary, production of new varieties of crops suited to the new conditions ; problems in the designing of new cropping schemes so as to arrange a sequence of crops at once profitable to the farmer and permitting the best use of the water available ; and the problem of water-logging and neutral salts in regions of canal irrigation. "Behind every large irrigation scheme there lurks the spectre of the alkali problem for which in its final stage no economic solution has been found."⁶ These observations of the Russell report are of special significance at present, since it has been found that the utilisation of irrigation facilities lags behind in the absence of such supplementary effort initiated well in advance.

While the construction of large dams and irrigation projects is of importance from the long term point of view, small and medium irrigation works have an increasingly important part to play in developing irrigation in this country. They have also many advantages. They provide employment opportunities and involve smaller outlay and can be executed in a comparatively shorter period. Considering that a large number of major irrigation or irrigation and power projects are already under implementation, there will have to be in the coming years a relative shift in favour of medium and small irrigation schemes.

The aim before the country is doubling of the area under irrigation in 15 to 20 years' time. The First Five-Year Plan viewed the problem in this light. Soon after the end of World War II, a number of irrigation projects, some multi-purpose and others only for irrigation, were sanctioned, and on some of these, work was started before the completion of detailed investigation and economic studies necessary to obtain a correct appraisal of the technical and financial aspects of the projects. The total area under irrigation from all sources in 1951 was about 51 million acres. During the First Plan, an additional irrigation was available for 16·3 million acres, 6·3 million acres from large and medium projects and 10 million acres from minor works. But, of the benefits from major works, the

⁶ Russell Report, pp. 57-58.

area actually irrigated was a little over only 4 million acres. This shows the incapacity for utilisation even when facilities are available. By the end of the Second Plan, an area of 21 million acres, 12 million acres from large and medium projects and 9 million acres from minor irrigation works, are expected to be added under irrigation. The area under irrigation would have thus increased by almost 75 per cent in 10 years. The bulk of additional irrigation from large and medium projects would result from the programmes undertaken in the First Plan. The new projects included in the Second Plan will account only for 3 million acres. The latter have an ultimate potential of irrigating 15 million acres. The total cost of irrigation projects included in the First and Second Plans are Rs. 720 crores and Rs. 380 crores respectively.

In addition, a large number of small schemes under minor irrigation works, namely, construction of wells, renovation of tanks, improvements to small streams and rivulets were included in the First Plan at an estimated cost of Rs. 47 crores. A large portion of expenditure on these schemes were by way of subsidies, loans, etc., to individuals or societies who were to contribute similar or greater share of the expenditure on such schemes. These minor works were to bring an additional area of 8.2 million acres under irrigation by 1955-56.

In the Second Plan, in selecting new projects preference is given to medium-sized projects though minor works continue to occupy a prominent place in the programme. Prior to 1951, there were about 2,500 tube wells, of which 2,300 were in Uttar Pradesh. These covered an irrigated area of about a million acres. In the First Plan period, provision was made for the construction of 5,780 tube wells under the different schemes of assistance. The programme for the Second Plan includes the construction of 3,521 tube wells with a total outlay of Rs. 20 crores and an irrigated area of 9,16,000 acres. An Exploratory Tube Well Scheme is also in operation for the construction of 350 exploratory wells.

SOIL CONSERVATION

The best possible use of land and water, on the basis of ascertained knowledge on topography and climate, for the maximum

benefit of society has come to be known as soil conservation.⁷ Soil erosion is an old phenomenon in this country and has left its mark over wide tracts and contributed to low productivity. The pressure of increasing population and indiscriminate encroachment on the natural protection of the soil have let loose the forces of destruction.

The factors responsible for soil erosion are : (1) deforestation, (2) over-grazing, (3) ploughing or clean cultivation of sloping land and (4) fire as in *Jhuming*. Erosion occurs not only in areas of heavy rainfall but also in dry regions. The problem is to reduce the velocity and the amount of water running off the surface.

It is estimated that on the whole about 2 per cent of surface soil is lost every year through erosion.⁸ According to agricultural experts, in the Punjab, about 60 per cent of the rural areas are affected by soil erosion.⁹ The survey of 50,000 acres carried out in Bombay also disclosed that only 17 to 23 per cent of the area is not affected by erosion, while 60 per cent is affected to such an extent that only 9 inches of the soil is left.¹⁰

The problem exists in almost all States. In Gujarat, there is the problem of arresting the onward march of the Kutch and Rajasthan deserts and of preventing the big rivers from cutting into fertile alluvial soil on their banks and forming what are called *Kotars*. In the Deccan and Karnatak, the land is undulating and measures have to be taken mainly to prevent sheet erosion and gully formation. Over a large part of India, the people have accepted a slowly deteriorating environment as part of the scheme of things ; the vast majority is unaware that erosion is slowly eating into the soil.¹¹

7 Soil conservation is sometimes taken to mean prevention of deterioration or protection from destruction rather than a positive change for the better. But the term has a positive connotation, viz. the best possible use of land and water.

8 Paper read by Captain V. M. Chavan, before the meeting of the Crops and Soils Wing, The Indian Council of Agricultural Research, March, 1950.

9 *Irrigation and Power*, Volume IX, No. 2, p. 161.

10 Proceedings of the U. N. Scientific Conference on Conservation and Utilization of Resources, Vol VI : Land Resources, p. 127.

11 G. V. Jacks and R. O. Whyte : *The Rape of the Earth*, pp. 86-88.

The measures for controlling erosion and restoring the productivity of eroded land can be broadly grouped into four types : (1) regulation of land use in accordance with physical characteristics, (2) afforestation and preservation of forests by scientific forest management, (3) improvement of land use practices which includes such measures as putting the upper slopes into grass, ploughing along the contours and strip cropping on sloping lands, proper crop rotations, application of adequate manure and fertilisers, care of fallows and other uncultivated lands and (4) engineering measures. These include construction of bunds and terraces, check dams, channels for drainage of surplus water, gully plugging, etc.

The forest and agricultural departments in India have some achievements to their credit in initiating measures for control of soil erosion, but the problem has not been so far tackled on a comprehensive basis. The Russell report observed that protection against erosion should be the responsibility of Government ; it should not be left entirely to the individual. It also recommended the holding of annual soil conferences where experts in forestry, animal husbandry and soil could meet and discuss the problems of different areas and suggest suitable remedies. The Crops and Soils Wing of the ICAR has done considerable work along these lines.

Since Independence and the review of the position by the Planning Commission, soil conservation has received a prominent place in agricultural reform. The Commission recognised that a large part of the soil conservation work has to be done ultimately by the farmers. For this purpose they have envisaged a Central organisation as well as corresponding State organisations to aid in the dissemination of knowledge about the nature of the erosion problem to the farmers so as to enlist their active participation in the programmes for controlling erosion. Improvement in farming practices is one of the measures of control which depends entirely on the farmers. Government can only convince them of the need for such improvement through demonstration of the correct methods. It must be emphasised that soil conservation involves co-ordinated and co-operative endeavour. It is no use one man constructing

bunds in his field if that field is unprotected from wash delivered on it by untreated land above. While an increase in the size of productive units may not be practicable at this juncture, technological improvements are impossible without at least collective action by aggregations of units.¹²

Several States have passed legislation for ensuring that the necessary action is taken by the owners of land to prevent soil erosion and to facilitate land improvement. The solution of the problems of soil erosion is linked with adequate provision of grazing areas, enclosures to prevent indiscriminate grazing and wider introduction of fodder crops which in turn would mean not only an improvement in livestock but also more manure and therefore greater fertility. In the Second Plan, conservation work is to be undertaken over an area of 3 million acres at a cost of Rs. 20 crores.

MANURES AND FERTILISERS

The problem of providing adequate quantities of suitable types of organic and inorganic manures has been subjected to much discussion in the last three-quarters of the century. As Dr. Voelcker emphasised, the problem is not ignorance or apathy on the part of the local cultivators but absence of cheap fuel, on the one hand and the costliness of the manures and fertilisers, on the other. On the first aspect, careful planning is needed by the Forest Department which has to consider the practicability of planting quick growing trees near the villages. As to the second aspect, the technical side of preparing suitable types of chemical fertilisers has been receiving attention from Government experiment stations. The farmer has also to be provided credit for the purchase of fertilisers and manures.

The type of fertilisers needed depends on the soil which varies widely in a country of the size of India. A systematic survey of Indian soils has not yet been carried out. However, soil experts are of the view that Indian soils are deficient in organic matter—nitrates and phosphates. Nitrogen is of the

¹² See Dr. Burns ; *Technological Possibilities of Agricultural Development in India*, 1944, p. 120.

first importance in crop production. The low nitrogen status of Indian soils was recognised as early as in 1880 by Voelcker. The 30 years' observations of drainage experiments at Pusa showed that Indian soils might lose about 100 lbs. of nitrogen per acre per year through drainage and through crops, and the effects of growing crops was to reduce the loss of nitrogen through drainage.¹³

Most State Governments have passed legislation making it obligatory on Municipalities and Notified Area Committees to dispose of night soils in the specified way and a steady improvement in the amount of urban compost prepared is noticeable. Under the scheme of Community Projects and National Extension Service Blocks, composting of farmyard manure and other waste materials is popularised. In 1955-56, 2,251 urban local bodies and centres were engaged in the composting of town wastes. As compared to the production of 1.6 million tons and distribution of 1.2 million tons of urban waste in 1951-52, the production and distribution were 2 million and 1.8 million tons respectively in 1955-56. In addition, sewage and sullage utilisation have been introduced in a number of towns. Another most beneficial method by which soil can be conditioned is the growing of leguminous crops and burying them under the soil. The latter carry out the natural form of nitrogen fixation. Though the value of green manure has been recognised, it has not become a common practice even in areas where adequate rainfall or ample irrigation facilities are available. It has gone down in practice in these areas due to the encroachment of cultivation under pressure of population. Only larger landholders have been observed to practise green manuring on any significant scale. Regarding concentrated manure, the principal oil cakes available in the country are : groundnut, sesamum, rape, linseed, cotton seed, castor, *mahua* and neem. They contain about 3 to 6 per cent nitrogen and 1 to 2 per cent phosphoric acid. As they are valuable as cattle feed, their availability as manure is limited. The by-products of slaughter houses which can be usefully conserved by the municipalities through proper tankage methods are horns, hoofs, bloodmeal, meatmeal, pieces of skin, rejected meat, etc. Bonemeal is a good form of phosphatic manure. About 1,50,000

13 I.C.A.R. Silver Jubilee Souvenir, 1929-54, December, 1954, p. 60.

tons of bones are collected annually, of which only about one-fourth is converted into bonemeal, and the rest is exported.

The use of chemical fertilisers has, of late, increased. The requirements of ammonium sulphate have been estimated at 12 to 13 million tons if nitrogenous fertilisers were to be applied on a countrywide basis. The minimum requirements on the basis of restricting the use only to cultivated land already under irrigation or expected to come under irrigation for important crops such as paddy, wheat, sugarcane, cotton, coffee, tea, tobacco, cocoanut, fruit trees and rubber are 450,000 tons of nitrogen—equivalent to 2.25 million tons of ammonium sulphate. As against this, about 275,000 tons were utilised in 1950 ; the consumption increased to 600,000 tons in 1956, an increase of over 100 per cent. The Sindri fertiliser plant has a capacity of 350,000 tons, and three more fertiliser projects are envisaged under the Second Plan, besides an expansion of the Sindri plant. The consumption of phosphatic fertilisers increased only from 43,000 tons in 1951-52 to 78,000 tons in 1955-56. The minimum requirement is estimated at 1.5 million tons. Under the First Five-Year Plan, the production capacity was expected to rise up to 209,355 tons in 1955-56. There is still a large gap to be bridged between the estimated minimum requirement and the actual production capacity within the country.

Chemical fertilisers can be applied effectively only if irrigation is available. It is also found that best results are secured when both organic and inorganic manures are used in combination. The line of advance therefore lies in fully conserving and utilising farmyard manure on the one hand and supplementing by fertilisers in areas which are being brought under irrigation.

Both in the case of irrigation and of fertilisers, promotional pricing, involving subsidisation in the initial stages, is justifiable and necessary. Over a period, of course, these services have to pay their way.

AGRICULTURAL IMPLEMENTS

Most of Indian agriculture is non-mechanised and the implements in general use are primitive. This is only another

way of saying that enough capital is not invested in agriculture. More than 90 per cent of the ploughs in India are of the indigenous or country type and are not essentially different in shape and work capacity from what they were perhaps a thousand years ago. There is need for improved agricultural machinery suitable for Indian soil conditions and the use of bullock power.

Several State Governments have attempted to introduce improved ploughs. These efforts have met with very limited success. There is no one type of plough that will be suitable all over the country; nor is it easy to standardise a few types as the plough is locally made by the village artisan. It is difficult to introduce improved implements unless the size of the farm is large enough. The facilities at present available for the servicing and repairing of implements and tools are not satisfactory. The techniques of the local blacksmiths and carpenters need to be improved by organising training courses and demonstrations.

Less than one per cent of the cultivated land in India uses any power-driven machinery. Increased financial assistance under the GMF campaign has accelerated the process of using improved implements, diesel engines, electrical motors, etc., for agricultural purposes. Mechanisation is often used in the restricted sense of tractor cultivation, but if it is conceived to mean the utilisation of power-driven machinery for various agricultural operations, there is wide scope for it. Tractors have been useful in India only for reclamation work, eradication of deep-rooted weeds, in making roads, bunds and channels, in anti-erosion work and on large estates where big areas have to be dealt with quickly and efficiently. The scope for tractor cultivation will remain limited unless some system of co-operative or joint cultivation is accepted.

Agricultural implements are classified according to the categories of work : (1) for preparing seed beds, (2) for cultivation operations, (3) for harvesting and threshing, (4) for processing and utilisation of agricultural produce and (5) for lifting water. Attention has been mostly devoted to improvement of the implements used for cultivation and for lifting water. There exists

considerable scope for improving the efficiency of implements used for seed bed preparation and for harvesting operations. The *Bakhar* or the indigenous blade harrow has been improved scientifically so that the depth of operations can be controlled. A mechanical seed drill has been designed and used in a limited way in peninsular India. Single row seed drills for jute and groundnuts have also been developed. The indigenous water-lift of the North has been completely replaced by a lift with links and buckets. Persian wheels have been used in the eastern and southern States. The indigenous *Mhote* or the single bullock water-lift of South India has been improved by using chains and buckets. Centrifugal pumps driven by engine or electrical power have become increasingly popular in Bombay, Uttar Pradesh, Madras and Mysore. In regard to improved machinery required for subsidiary occupations, extensive experiments have been conducted on improving the performance of rice mills. With a view to securing a higher turnover of unbroken and unpolished rice kernels, the Japanese type of rice hullers, both hand-operated and power-driven have been found to be efficient. The wooden roller sugarcane crushers have been replaced by crushers with iron rollers. Barns for curing tobacco and cold storage arrangements for potatoes and oranges have been designed and built. The technological laboratory of the Indian Central Cotton Committee at Bombay has designed a hand-cum-power-driven table type cotton gin. For transport of agricultural produce, the bullock cart, however, remains as primitive as ever. In some parts of Uttar Pradesh, complete cart wheels made of steel have become popular. In a few organised farms, carts with rubber tyre wheels are in use. The modernisation of agricultural techniques is essential for securing any increase in productivity but this requires changes in organisation and management of farms.

CULTURAL PRACTICES

India has a long tradition of sound cultural practices, but there has been a gradual deterioration from the former standards of rotation of crops. This is because of lack of proper technical advice. The prospect of immediate gains from commercial crops has often led to indiscriminate departures from the most suitable rotation of crops. The existing practices require improve-

ment in several directions. Introduction and popularisation of scientific practices in land utilisation and cropping should be an important function of the new National Extension agency. There is, for example, the Japanese method of rice cultivation. This method, it has been demonstrated, improves the yield of rice substantially. In 1953 about 280,000 acres were covered under the Japanese method, while a partial use of the method was tried on another 3 million acres. In 1955-56, the area under this improved practice increased to 2.1 million acres. The additional yield per acre reported is 38.0 maunds in Madhya Pradesh, 21.6 maunds in Travancore-Cochin (Kerala) and 19 maunds in West Bengal. There was a record produce of 63 maunds and 30 seers of paddy at Sultanpur village about 50 miles from Bhopal. The average yield of paddy per acre in this State under the indigenous method of cultivation is between 8 to 10 maunds. In Bombay, considerable progress has been made with 700,000 acres under the new method with a record output of 1,600 lbs. per acre. The propagation of the new method has been encouraged by starting centres for training farmers and setting up demonstration plots on cultivators' fields and Government farms, by a reduction in the price of fertilisers, distribution of improved seeds and provision of increased credit facilities, etc. In this, as in other fields of crop improvement, research, demonstration and work on the field have to move together.

PROGRESS OF TECHNICAL RESEARCH

The formulation of a comprehensive and phased programme of crop improvement on the lines indicated will have to be based on the progress that has been so far made in technical research in agriculture in this country. There are three distinct stages in such progress: (a) acquisition of scientific knowledge by specialised research and study; (b) application of the knowledge on experimental farms and stations under conditions approximating to those found in rural life; and (c) extension of the results thus obtained to the agriculturists who are the real beneficiaries concerned and who must therefore be convinced as to the desirability as well as the practicability of the improvements suggested.

For the acquisition and development of scientific knowledge, the best media are the Universities and the Technical Institutes.

The number of agricultural colleges and institutions in India has been small, and very little of agriculture or agricultural economics is covered in the Arts courses or the Science courses in the Universities. It is only in the course of the last few years that the Agricultural Colleges and the post-graduate institutes for economic research have directed their efforts towards an intensification of their courses and an improvement of their facilities for research.¹⁴ In recent years, under the Technical Assistance and other programmes of the international organisations, Indian scholars and administrators have been sent abroad to study conditions in other countries. Our own scholars have transcended the limitations of the educational system under which they grew up and have ventured into higher technical and scientific research, often with remarkable success.

Some of the agricultural institutes in the country have been carrying on research work in the applied branches of modern science bearing on different aspects of agriculture. Recently the scope of activities of these institutes has been extended and new institutes have also been established for the purpose of developing the technical side of research. Professors Black and Stewart, after a review of the position of agricultural education in India, observe that an emphasis on 'practical work' in the Indian agricultural colleges is highly desirable under Indian conditions. They also lay great stress on post-graduate education and research, including agricultural economics, as in the carrying forward of the Five-Year Plans, there will be need for a rapidly growing number of men who are specialised in a very practical down-to-earth research to carry out programmes in particular areas and situations.¹⁵ India has to catch up with the progress in other countries and to make up a great deal in the application of scientific results to the field.

Organisation of Research

The Indian Agricultural Research Institute at New Delhi occupies a position of all-India importance; its function is to

¹⁴ See in this context J. D. Black and H. L. Stewart: Report on the Research, Teaching and Public Administration of the Economics of Agriculture for India, 1954.

The Joint Indo-American Team on Agricultural Research and Education (1957) has investigated the position and recommended, in their report, the sponsoring of Rural Institutes.

¹⁵ *Ibid*, pp. 106, 111.

provide a scientific basis for the activities of the various Departments of Agriculture in the States and to undertake work of such wide application as must be done at one centre so as to serve the entire country. The work of the Institute falls into three divisions: (1) standardisation of methods for the use of other stations, (2) making collections of insects, fungi, soils, etc., and also a register of varieties of crops, all these to be made available to the staffs of State Departments, and (3) investigation of agricultural scientific problems which seem to be near to practical application.¹⁶ The Russell report suggested that the Institute should work in close co-operation with the Indian Council of Agricultural Research which in turn must insist on the use of recognised methods of samples and analysis; for example, problems like the methods of sampling of soils and analysis made in different parts of India with a view to preparing soil maps, comparisons in field experiments of the relative values of nitrogen in different kinds of manures, etc., could be taken up. It may usefully co-operate with several other departments, *e.g.*, with the health department in investigations likely to improve the quality of the dietary of the villagers, and with the marketing department in investigations likely to improve the market value of Indian agricultural products. These suggestions are being gradually implemented.

The Indian Council of Agricultural Research is a central body, whose primary objective is the promotion, guidance and co-ordination of agricultural research throughout India. The Council does not have any research institute of its own undertaking research investigations. Its *modus operandi* is to finance approved research work carried out in Government Institutes belonging to the Centre and the States, in Universities and also in recognised private institutions. However, in regard to specific cases, such as the cost of production especially of cotton and sugarcane, the statistical control of agricultural experiments, the Council had undertaken direct research. Several schemes of the Council's work are carried on through the various special institutes established for the purpose and an adequate idea of this can be had from the Russell report and the Administration Reports of the Council. Vast amount of pioneering work, extending over a wide range has been accomplished and a stage is now reached

¹⁶ Russell Report, p. 81.

when a reorientation of the Council's activities should be considered. The great need is for a fuller use of existing knowledge rather than the accumulation of more knowledge, for work on the cultivator's field rather than in the laboratory."¹⁷

The Council has since reorientated its activities on the lines suggested in the report. Its activities are not only limited to research projects, but also include extension and development. It also undertakes training of students in agriculture and animal husbandry statistics and has helped to build up a school of research in this field. In order to disseminate the results of research, the Council publishes a number of journals, monographs, bulletins, pamphlets, etc., which range from purely technical communications useful only to trained research workers to non-technical ones written in popular language for the benefit of the layman. The Royal Commission on Agriculture (1928) had hoped that "through the proposed Council of Agricultural Research it would be possible to develop satisfactorily agricultural research in India, to secure a continuity of policy and to ensure a programme of ordered advance in the domain of agricultural research." The Council has now an impressive record of progress to its credit; it has established itself as the central agricultural organisation which guides, finances and co-ordinates research problems connected with agriculture and animal husbandry in the widest sense of the term.

Research in Agricultural Economics

A prominent defect noticeable in the present organisation of agricultural research is that the technical problems are being attended to without due reference to the economic aspects. Technical research has its value, but it cannot prove fruitful unless it is correlated with research into the conditions under which farming is carried on. The agricultural economist was until recently an unknown person not merely in the Government Departments but even in the Universities and Colleges. The Colleges of Agriculture specialised in the technical aspects of agricultural research, but paid comparatively small attention to economic aspects. This is not to say that no specialised investigation and study of these

¹⁷ Russell Report, p. 215.

problems have been made. Some of the Universities have encouraged the study of different problems of agricultural economics, such as tenurial reforms, regulation of money-lending, relief of indebtedness, co-operation, etc. There have been a number of village surveys and re-surveys and several contributions by officials and non-officials on some problems of rural reconstruction. As a result, therefore, the general nature of the agricultural and rural problems has been known fairly well. There was general agreement that the main problem in India was to make agriculture more remunerative. But this could be done only by a suitable co-ordination of technical and economic research and on these aspects of the problem even the Russell report had hardly anything to say.

The late Prof. A. W. Ashby after a careful survey of the position of the study of agricultural economics in the country observed in 1950 : "Having regard to (a) the area of agricultural land, (b) the size of agricultural population, (c) the importance of agriculture in the national economy—its actual and potential contributions to national wealth—the small provision made for investigation and research in agricultural economics is really appalling."¹⁸ Considerable effort has been made in recent years to promote and strengthen the facilities for research and training in agricultural economics. The Ministry of Food and Agriculture has a well-organised Directorate of Economics and Statistics. The Reserve Bank of India has a specialised Division for research on rural problems. The teaching and research facilities at the post-graduate stage have been expanded in several Universities. The Planning Commission has sponsored, through its Research Programmes Committee, a number of research projects in the field of agricultural economics, especially from the point of view of development.

Professors J. D. Black and H. L. Stewart have in their report given a general survey of the present status of research, teaching and public administration in the field of the economics of agriculture and have made a number of useful suggestions. They outline 24 illustrative research projects in the fields of (1) pro-

¹⁸ Prof. A. W. Ashby : *Agricultural Economics in India—A Report of His Winter Tour, 1950*, p. 2.

duction and land-use economics of the farm and village, (2) consumption economics of the family, (3) marketing and prices of farm products, (4) rural credit, (5) land tenure and (6) the nation as an economic unit. Finally, as was only to be expected, the report emphasises the need for giving greater attention to planned purposive research in agricultural economics and for strengthening the various Government and University Departments which are engaged on agro-economic research and surveys. These suggestions have been generally accepted by the Agricultural Economics Committee of the ICAR. There is, however, need for the creation of a central organisation like the Bureau of Agricultural Economics in the U. S. A., which will plan, guide and help local institutions devoted to the training of personnel and research.¹⁹ The main object of the Central Bureau or Institute of Agricultural Economics would be the co-ordination of research activities in the sphere of agricultural economics which are at present being conducted by different institutions and Government agencies in an isolated way, sometimes without a definite plan. With the setting up of a permanent central co-ordinating organisation on some such lines as suggested above, the establishment of agro-economic research centres and the institution of studies into farm management, it will be possible to undertake planned research to provide a sound basis for the formulation of agricultural policy.

Agricultural Statistics

During the last decade considerable advance has been made in the coverage and quality of agricultural statistics. But much more work is required before the facts of the agricultural economy can be said to have been fully mapped out. In a country like India where conditions vary so much from region to region, there are special difficulties in the way of an accurate and timely appraisal of the changing trends. Agricultural statistics are vital for formulation of plans, for evolving yardsticks in terms of which to judge the investment required for securing certain results and for assessing the actual response in terms of measu-

¹⁹ Shri Manilal B. Nanavati: "The Organisation of Agricultural Economics Research in India", Supplement to *Agricultural Situation in India*, November, 1954, pp. 56-57.

rable results, of the efforts being made to raise productivity and enlarge incomes. There is thus a vast amount of work to be done in the field of rural investment, employment opportunities, demographic changes and the like. Suitable concepts and norms have to be evolved for such appraisal and for further prognostication. All this will require co-ordinated advance in agricultural economics as well as in statistical work.

Agricultural Extension

The final stage in crop improvement is the extension of the results of research to the cultivator. This is the greatest need of the moment, for agricultural techniques and methods in this country have remained stationary for generations past. Some excellent results by way of better yields have been obtained at the various laboratories and research stations but all these are of little avail unless this knowledge is applied to the actual fields and farms where the cultivator works.

The ICAR, on the recommendation of the Russell report undertook an examination of the methods of demonstration and propaganda in use and put forward the project method, the main idea of which is to put across a whole group of tested improvements simultaneously and to observe the combined effect of all these on the cultivator's income and on the land.²⁰ This method implies the use of improved seeds, scientific methods of cultivation, manuring, irrigation, drainage, preventive and curative measures against pest and diseases, improvement of livestock, methods of marketing, etc. The demonstration method previously adopted was usually confined to one particular item of development and was carried out by the Government departmental staff, whereas the project method incorporates all the items of development into a single scheme and has to be worked out by the cultivator himself under official guidance and supervision. For the purpose of evaluating the utility of a specific improvement a single demonstration plot may prove sufficient, but for integrated development under the project, an entire holding or even a village as visualised in the project method is preferable.

²⁰ *Indian Farming*, March, 1941.

With the adoption of the First Five-Year Plan, agricultural extension work is being organised as part of the programme of Community Development. The National Extension Service which is the agency of Community Development provides the basis for a co-ordinated approach to problems of technical research, agricultural development and rural reconstruction. By the end of the First Plan period, some 140,000 villages were covered by this programme. It is proposed to cover the entire rural area by the end of the Second Plan period. It is through the National Extension Agency that the programmes of increasing food production, spreading the use of improved techniques, extension of facilities like education and health, the building of community halls, the construction of roads, etc., are being undertaken in an integrated way.

CHAPTER VIII

THE LAND PROBLEM

GENERAL CONSIDERATIONS

The ownership of land and the nature of rights and obligations between the members of the rural community arising as a consequence of the utilisation of land are the product of a long evolution determined by the geographical, economic, social and political conditions and circumstances of the community. The complex of land tenures and tenancies which arises as a result of this process affects vitally the efficiency of cultivation and the distribution of the produce of the land.

Whether the State recognises private ownership in land; whom it recognises as owner and on what terms; whether the owners actually cultivate the land or whether they hire it out to tenants; on what terms these latter are called upon to work; these are the factors which determine the structural basis of the country's agricultural economy. If this structural basis is unsound, attempts to secure agricultural improvement cannot succeed. The State has to take into account all these vital questions and help in bringing about necessary changes in respect of tenures and tenancies so as to ensure that the land system does not hamper but promotes agricultural progress.

In India, the land problem did not receive, until the post-Independence period, the attention it deserved. Various economic and social factors combined to produce an inefficient and exploitative land system which sapped initiative, hampered economic progress and led to inequitable distribution. The land problem has been at the root of many of the deficiencies and drawbacks of Indian agriculture. A reform of the land system has, therefore, to be an integral part of the problem of agricultural improvement and rural reconstruction.

LAND SYSTEMS*Evolution of Tenures*

The types of the land system in India and their main features were described in Chapter III. Reference was also made there to the types of settlement, permanent and temporary. Here, we shall outline briefly the evolution of these systems and the growth of diverse interests and classes on the land.

THE PERMANENT SETTLEMENT—ZAMINDARI

As the East India Company established its political domain in one part of the country after another, it had to evolve some system of dealing with the landed interests. But this was no simple task for the Company as it found itself confronted with long-established customs and usages. The officials of the Company, however, had little interest in anything beyond the extortion of the maximum amount possible from the agriculturists, and naturally they took the line of least resistance by recognising the existing arrangements, or adopting new ones, where necessary, in order to make sure of their own receipts. The system of land revenue then prevailing generally dated far back to the days of the Hindu Kings prior to the Moghul rule, a system under which the king was entitled to one-sixth of the gross produce as measured by the actual product gathered on the threshing floor. In the days of Sher Shah and Akbar, certain reforms had been introduced, such as a cadastral survey, and the payment of revenue in cash or in kind at the option of the cultivator, the amount being determined in view of a variety of factors including the fertility of the soil. In the latter days of the Moghul Empire, we have it on the authority of Dr. Radhakamal Mukerjee¹ that collective assessments superseded the methods favoured by Sher Shah and Akbar. Settlements were made with the provincial chief or any person in authority for a fixed annual revenue and

¹ Land Problems of India, p. 324. It is interesting to compare in this connection the description of this system as given by the Hon'ble Mr. Azizul Huque in his work, "The Man Behind the Plough," Chapter XIV.

the imperial share was raised to half the produce of the land. This led to the oppression of the peasantry by the revenue farmers who extorted from the cultivators as much as they could, and there were cases of women and children being sold as slaves for defaults in payment of revenues. The East India Company also farmed out the revenues to older zamindars and chiefs in Bengal, Bihar and Orissa. Warren Hastings tried temporary or short-term settlements, but the system had disastrous results. Ultimately came Lord Cornwallis's Permanent Settlement in Bengal, based on the analogy of English conditions, but involving in fact an unwarranted revolutionary interpretation of ownership rights, the consequences of which were felt till recently. The zamindars who were originally agents of Government and, therefore, under the supervision of Government were declared full proprietors of the areas over which their revenue collection extended. The assessment was fixed at about 10/11ths of what the zamindar received as rent from ryots, the balance of 1/11th constituting the zamindar's remuneration. The revenue liability was fixed in a rough-and-ready manner without any survey of landed rights and interests or any investigation into the productive capacity of the different classes of soils. The intention of protecting the tenants as well was never made effective. The landlords became a functionless and parasitic class interested only in getting the maximum of rent from the peasants, and Cornwallis's dream of creating in Bengal a beneficent landlord-capitalist system resting on the contentment of the cultivator failed to materialise.² It took three-quarters of a century for the iniquity of the position to become apparent. It was only after 1859 that attempts were made to grant protection to the cultivator by means of tenancy legislation.

In Other Parts of India

In the meanwhile, steps were taken to extend the Permanent Settlement to other parts of the country as the Directors of the

² Cf. "In that interval of 66 years, that is, between 1793 and 1859, while the proprietary body grew in strength and prospered in wealth, village communities perished, the *parganah* rates (by which the assessment of the resident cultivator's rent was limited) disappeared, and almost every vestige of the constitutional claims of the peasantry (if ever such existed beyond a small privileged class) was lost in the usurpations and encroachments of the landlords." The Lt. Governor of Bengal speaking before the Legislative Council in 1883. Quoted by the Hon'ble Mr. Huque, *Op. cit.*, p. 255.

Company were favourably impressed by the regularity with which revenues poured in from Bengal under that Settlement. The system was applied to Benares, to North Madras and certain parts of South Madras, but difficulties were encountered as soon as it was sought to be introduced in the rest of South Madras. In the major portion of the Presidency, the villages were of the ryotwari type, and the officials of the Company, under instructions from the Court of Directors, tried to group together these villages artificially and to sell the landed rights therein to the highest bidders who were then to become the landlords of the whole estate. The attempt failed miserably and had to be given up in favour of the ryotwari system. The question of extending Permanent Settlement came up for discussion even after the abolition of the Company's rule, but Government had learnt by experience and turned down firmly all proposals for a further extension of the system.

It is perhaps pertinent to observe here before leaving this topic, that two issues have often been mixed up in the controversies on the subject. One refers to the period of the Settlement, that is, whether the share of the State is to be settled in perpetuity or only for a definite period; the other is as to who should be recognised as the owner of the land and who should therefore be dealt with by the State directly—the cultivator himself or some intermediary. It has happened as a matter of historical accident that the Permanent Settlement has been associated with the zamindari system of tenure, and temporary settlements have characterised the ryotwari system of tenure. There is, however, no necessary connection between the two. Permanent Settlements even with ryots individually are conceivable, and were in fact contemplated by the originators of the ryotwari system. On the other hand, we may also have a system of temporary settlements with zamindars. An illustration of the latter is the Malguzari system in the C. P. The Malguzars were revenue farmers under the Peshwas. They had no proprietary rights in the land. But, the British Government recognised them as owners and heads of villages and made them responsible for the payment of land revenue, the only difference in this case as compared with that of the landlords in Bengal being that the settlements here were temporary. Besides these zamindari systems in Bengal,

U. P., parts of Madras and of C. P., there are several other zamindari types of tenure in India, such as, for example, the Talukdari system in parts of North Gujarat and the Khoti system in the Konkan. The land revenue assessment and administration in these cases are governed by special Acts. Although there are differences in detail in the working of these various types of tenures, the problems arising under all forms of zamindari systems are, broadly speaking, similar, and it is not proposed here to examine all these systems in detail.

Abandonment of the Permanent Settlement

Doubts as to the desirability of extending the Permanent Settlement to the new territories that were being added from time to time to the Company's domain were expressed as early as 1808, the main objection being the possible loss of revenue on that account. In 1821, the Court of Directors declared themselves against the introduction of Permanent Settlement in Northern India.³ Nevertheless, the controversy raised its head several times thereafter, especially in view of the serious toll of famines in different parts of the country. One school of thought believed that a permanent fixation of the State's demand would be of great help to the landed interests and the peasantry, but the Government of the Punjab opposed vigorously the conclusion of a Permanent Settlement on the ground that the Punjab was still undeveloped and that it would be wrong to fix up permanently the State's share in view of its great possibilities of development in the future.⁴ The question became the subject-matter of several Government minutes and despatches, and in 1869, it was decided that the question of effecting a Permanent Settlement should be deferred so long as the land continued to improve in value.⁵ Finally, in 1883 the Secretary of State for India wrote to the Governor-General of India directing that the policy of Permanent Settlement should be formally abandoned.⁶ As Dutt points out, the policy was not abandoned because it was found to be at all against the interests of the people, but because the Government had now

³ R. C. Dutt : *Economic History of India in the Victorian Age*, p. 34.

⁴ *Ibid.*, p. 276 ff.

⁵ *Ibid.*, p. 289.

⁶ *Ibid.*

quite forgotten the original beneficent aims of policy as outlined by Lord Cornwallis. The decision not to extend the Permanent Settlement to other parts of India had thus nothing to do with the recognition of evils such as, for example, the Bengal Land Revenue Commission have now pointed out with such emphasis.

However, the experience of the working of the Zamindari system showed none of the expected advantages; on the contrary, several defects were noticed. The fixity of land revenue was a loss to the State. It created vested interests. The zamindars not only failed to act as leaders of the rural community, but they actually oppressed the tenants by all sorts of illegal exactions and became parasitic on the land. The system led to a mass of litigation and agrarian discontent and also to social degradation and administrative inefficiency. The greatest evil of the system was sub-infeudation. The ultimate result was a steady reduction in the number of actual cultivators possessing occupancy rights and a large increase in the number of landless labourers. When this was combined with the further evil of sub-division and fragmentation the vicious circle was complete. In view of these defects, hardly any one could defend the Permanent Settlement.

THE MAHALWARI SYSTEM

The principles of the Mahalwari or joint village system which was first adopted in Agra and Oudh and later extended to the Punjab were laid down in Regulation IX of 1833.⁷ It was recognised in these cases that the villages concerned were units by themselves, the ownership of property was joint or communal, and that it was not possible therefore, to work out here a settlement with individual landlords as in the case of Bengal. Hence, these villages or Mahals, were settled with directly, though a co-sharer of standing was generally selected to undertake the primary liability of paying the land revenue. There were variations in detail as between the different parts of the country under this system, variations in regard to the procedure and period of settlement and the land revenue assessed. The State demand varied from 40 to 70 per cent of the rental. In the Agra Settlement, although

⁷ Dutt, *Op. cit.*, p. 34.

the responsibility for payment of land revenue rested on the village as a whole, any section of a village or a co-sharer could demand a separate or individual revenue liability. In the Punjab also, though the liability was in theory joint as well as several, the share of the revenue from each landholder was distinguishable and could be recovered separately, so that the cultivators were almost in the same position as the peasant proprietors in Bombay and Madras. In the C.P., the system was practically on the same lines as the Agra Mahalwari Settlement so far as the basis of settlement was concerned. There was, however, the significant difference that the State had recognised the *Malguzars*, that is, the old revenue farmers under the Mahratta, as heads of villages, with proprietary rights. The idea once again as in the case of Bengal was to create a new class of vested interests who would be loyal to the new Government. The conferment of this status was considered as a "gift" and the claim of the State was limited to one-half of the rental. The settlements were to operate for 30 years. The consequence of all this has been the break-up of the old village community and the growth of an unco-ordinated individualism, whatever may have been the original intention of those who advocated and introduced the Mahalwari system based on the recognition of the joint character of the village community and the common rights in lands attached to the village.

THE RYOTWARI SYSTEM

We now go on to trace the evolution of the third type of land system in India—the Ryotwari system, under which the individual ryot is dealt with directly by the State. This system was first introduced in the districts of Baramahal in Madras by Captain Read and Thomas Munroe in 1792, and was gradually extended to other parts of the province and thereafter to Bombay. "Between 1808 and 1818," says R. C. Dutt,⁸ "the Madras Board of Revenue urged the wise plan of recognising the village communities of the Province." And he adds, "but representative village communities had no place in the scheme of the Company's absolute Government; the Directors decided to deal with the cultivators individually, without any intermediate bodies. The ancient village communities of Madras declined from that date."

⁸ Dutt, *Op. cit.*, p. 67

The same story was repeated in Bombay. Elphinstone, indeed, sent home reports⁹ about these village communities which contained "in miniature all the materials of a State within themselves." He also drew the attention of the authorities in London to the fact that "a large portion of the ryots are the proprietors of their estates, subject to the payment of a 'fixed land tax' to Government," but, to quote Dutt again, "a fixed resolve to make direct arrangements with every separate cultivator and to impose upon him a tax to be revised at each succeeding settlement, necessarily weakened village communities and extinguished Mirasi rights." Dr. Radhakamal Mukerjee has refuted Baden-Powell's contention that the ryotwari village was the original type in India, that the earliest settlers had no ideas of common tribal ownership and that individual property was the rule even in early land settlement.¹⁰ If this is true, the claim that in recognising the ryotwari system, the Government only gave statutory recognition to what was already a settled fact would be untenable.

Under the ryotwari system the ryot or the landholder is recognised as holding the land directly from Government without the intervention of any intermediaries. His tenure is known as "occupancy" tenure which means the lands are heritable, transferable and otherwise alienable without the sanction of Government, but are subject to forfeiture in case of failure to pay the land revenue as assessed periodically. A system like this leaves a great deal of discretion to the Settlement Officer at the time of assessment; there is necessarily a great deal of guess-work in the estimation of several of the items relevant to the fixation of the assessment, and, when this is combined with the fact that every periodical revision is utilised as an occasion for enhancement, we have some explanation of why this system of 'peasant proprietorship' has not brought in all the glorious results attributed to it by economists and land reformers. The implication of the ryotwari system is that the State owns the land, and that the landholder derives his title to it directly from the State. Apart from the other consequences of this system, to which we shall turn presently, this claim of the State has destroyed the collective basis of village life and organisation.

⁹ *Ibid*, p. 50 ff. (italics in the original)

¹⁰ Land Problems of India, *Op. cit.*, pp. 325-327.

Decay of the Village Community

This review of the three prevalent systems of land tenures in the pre-Independence period, *viz.*, the Zamindari, the Mahalwari and the Ryotwari tenures indicates clearly that the early British administrators approached the problem of land settlement and assessment only pragmatically. Their inclination was to take as far as possible the line of least resistance so long as the payment of the dues fixed were assured. The fact nevertheless is that the early land policy of the Company and even of the officers under the Crown brought about far-reaching changes in the basis of land ownership, the system of cultivation, and the legal and social relationships as between the different classes of the rural community. The traditional village economy disintegrated, parasitic interests developed on the land, and a series of measures had to be taken in the course of the 19th century to rectify the obvious evils.

In the evolution of the Indian land tenure system, there was thus an inter-relationship between the mode of settlement of land revenue and the recognition of rights in ownership and cultivation. Before the history of land revenue assessment is taken up for study in the next chapter, it is necessary to know here the effects of the system of land tenure on the various interests in the cultivation of land and measures of reform introduced by Government.

TENANCY PROBLEM

The land tenure system refers to the relationship between Government and the landowner. If the landowner himself cultivates the land, there is no further problem, except that of the relationship between the landowners and the agricultural labourers. The problem of tenancy arises when the landowner or zamindar lets out the land to someone else, who then becomes the tenant, on terms defined by contract or custom. The distinction between such a tenant and a mere agricultural labourer, though sometimes blurred in practice, is quite clear-cut conceptually. The latter receives a fixed wage and works under the supervision and control of the employer. He has no right to the land and is not directly concerned with the product. He merely does his allotted job in return for the wages, and there his responsibility ends. A tenant

works on his own. He agrees to pay to the landowner a certain cash rent or, more often, a specified share of the produce. He utilises his own labour, also that of the members of his family, and may, in busy seasons or otherwise as need arises, employ hired labour to assist him. The landowner may supply, besides the land, some capital and equipment; often he supplies only land and takes no interest in actual agricultural operations. A tenant is thus not only his own manager, but also in part "entrepreneur"; his reward fluctuates according to the crops he obtains and the prices they fetch. It is a remarkable fact that in India, in the zamindari as well as in many cases in the ryotwari areas, the owner did not cultivate the land himself, so that the problem of tenancy became acute all over the country.

The emergence of this problem is due to a variety of causes. In the permanently settled parts of the country, the inevitable result of conferring proprietary rights on the old revenue farmers was the creation of absentee landlords and the degradation of the original holders to a position of semi-serfdom. In the U.P., for instance, the creation of Talukdars in Oudh after the Mutiny was dictated by political necessity irrespective of the rights of the mass of the peasantry. Nowhere in the whole land history of India, "can a better example be found of how the fate of millions of people is bound up with the political upheavals in the country." "The Government, entirely for political considerations, subordinated and sacrificed the interests of the millions to the interests of the few."¹¹ In the ceded as well as the conquered Districts of Agra, early settlements were made with so-called zamindars without any proper survey or enquiry. The new zamindars who were recognised by the British had little respect for traditional customs and rights. Their chief aim was to realise as much revenue as possible lest their newly-got zamindari should be put to auction and sold off to others.¹² Therefore, attempts were made to correct the initial mistake by legislation and a more systematic recording of rights, but, broadly speaking, the results have been similar to those in Bengal—a multiplicity of proprietary and sub-proprietary tenures, tenancy of various grades and a host of rent-receivers and rent-payers between the zamindar and the actual cultivator. This

¹¹ B. R. Misra, *Land Revenue Policy in the U. P.*, pp. 196-197.

¹² *Ibid.*, p. 56.

sub-infeudation resulted in the neglect by all these classes of their true economic functions since all the new interests in agriculture, instead of trying in co-operation to raise the maximum produce from the land, sought to wrest the utmost from one another. The tenant in this situation was unreservedly at the mercy of the landlord and the relationship between the two came to be characterised by various exactions in kind and cash, "fines", rack-renting and eviction of the tenant without any just reason. In fact, in all zamindari areas, whether settled permanently or temporarily, the development has been along similar lines, so that a series of tenancy laws had to be passed to afford some protection to the ryots.

TENANCY LEGISLATION

In instituting the system of Permanent Settlement in Bengal, it was made clear that the recognition of revenue farmers as landlords for the purpose of collection of land revenue did not give them a 'blank charter' to exploit and oppress the cultivators. The Court of Directors expressly reserved the right to make from time to time all such regulations as may be necessary to prevent the raiyats being improperly disturbed in their possession or loaded with unwarrantable exactions.¹³ Though this declaration was reaffirmed in 1819, the actual rights of the cultivators were left unascertained at the time of the Permanent Settlement and were in fact allowed to be usurped by the zamindars.¹⁴ By the notorious "*Haptam*" Regulation of 1799, the zamindars were vested with wide and arbitrary powers of distraint. The Regulation V of 1812, known as the "*Panjam*" only reduced the powers. What the zamindar thus lost, he made up by the exercise of illegal power. One regulation followed another to help the landlords till one finds the breath-taking regulation that raiyats preferring litigation or groundless complaints against the zamindars were to be punished with fine and imprisonment.¹⁵ At this time, a long and utterly unrealistic, if not tragic, controversy was raging among British administrators and jurists, as to whether the Permanent Settlement conferred on the zamindars absolute proprietary rights or whether the Government could still claim the right to regulate the exactions

¹³ Quoted by M. Azizul Huque, *Op. cit.*, p. 226.

¹⁴ R. Mukerjee, *Land Problems of India*, p. 149.

¹⁵ *Op. cit.*, p. 249.

of the zamindars from the cultivators. In 1819, the Court of Directors admitted regretfully "the absolute subjection of the cultivator of the soil to the discretion of the zamindars."¹⁶ But nothing was done in the matter upto 1859, so that "feudalism on the one hand, serfdom on the other, were the principal characteristics of the land system of Bengal."¹⁷ The ryots were rack-rented, impoverished and oppressed, but large areas of Bengal, and waste lands were brought under cultivation and the zamindar's margin of profit increased.¹⁸ Legislative interference became unavoidable. The Bengal Rent Act of 1859, divided the settled cultivators of Bengal into three classes. For those who held lands at the same rents since 1793, it was enacted that the rental should remain unaltered for all time to come. For those who held lands at the same rents for 20 years, it was to be presumed that they had paid the same rents since 1793 until the contrary was proved; and those cultivators who had held lands for 12 years, were granted occupancy rights, their rents not to be raised thereafter except on specific and reasonable grounds provided in the law. Certain other powers exercised by the landlord, such as that of having any ryot of his arrested without proving a case against him, were also cancelled.¹⁹

As the Rent Commission of 1880 clearly revealed, this legislation proved ineffective. The zamindars did their best to prevent a cultivator from becoming entitled to the occupancy tenancy through 12 years' uninterrupted cultivation. Various devices were employed for not only enhancing the rents but also for ejecting the old tenants. Such treatment was followed by acute agrarian discontent and even riots. In 1885, another Tenancy Act was, therefore, passed. The two main objects of the Act were to extend the right of occupation to settled cultivators, and to extend adequate protection to non-occupancy cultivators.²⁰ But even this was of no avail. Rents went on increasing, on the doctrine of average rate on grounds of higher prices, to the maximum from 1885 to 1928, years of progressive increase of prices

¹⁶ *Ibid*, p. 252.

¹⁷ Speech by the Lt. Governor of Bengal in 1859 quoted by Azizul Huque, *Op. cit.*, pp. 252-253.

¹⁸ Report of the Land Revenue Commission, Bengal, Vol. I, 1940, pp. 24-25.

¹⁹ *Op. cit.*, pp. 263-264.

²⁰ Dutt, p. 461.

throughout India. The law again intervened in 1928 and made occupancy holdings transferable, subject to certain conditions. It also provided that the landlord had the right of pre-emption to purchase the holding within two months of the sale at 10 per cent over the sale price. The right of pre-emption, which should have been vested with the occupancy ryot, was given to the landlord, even though more than half a century had elapsed since the first Tenancy Act was passed.

Thus although tenancy legislation was undertaken, the old policy of allowing "every point about which there could be any doubt . . . to settle itself in favour of the landlord and against the public" continued.²¹ The other provinces such as the U.P., the Punjab, Bihar, Orissa, Bombay and Madras also passed legislation in the course of this period more or less on the model of the Bengal Tenancy Acts, dealing with the *zamindars*, *talukdars* and *khots*. But the results were everywhere the same, and the law was too tender to the landlord to uproot the evils of tenure from the land system. As the Floud Commission summed up the position : "It is true that the successive provisions of the Tenancy Acts have endowed the raiyats with the practical ownership of the land. But a large and increasing proportion of the actual cultivators have no part of the elements of ownership, no protection against excessive rents and no security of tenure."²²

In spite of all the legislation since 1859, the defects of tenancy continued as the law found it difficult to limit the landlord's rights and powers which had been propped up for a long time by statute as well as by judicial interpretation. Several factors were at work which made the problem more complex and more acute sooner than the law could cope with. These factors were : the rapid growth of population with increasing pressure on the land ; the growth of a money economy, which led to extensive alienation of land from the agriculturists to non-agricultural classes ; the de-industrialisation of the country-side, which was a characteristic feature during the period of the economic transition in India ; and the prestige attaching to the ownership of land, combined with the notion that actual work on the land was de-

²¹ Report, 1871-72, quoted by Huque, *Ibid*.

²² Report, p. 39.

grading, which led the well-to-do classes to invest in land and become absentee landlords. In this process the erstwhile owner after selling off his land to a money-lender often went on bended knees to him asking to be allowed to cultivate his old plot of land on terms which were necessarily unfavourable to him.²³ The divorce of ownership from cultivation coupled with the excessive pressure on land resulted in a rapid rise in the number of functionless intermediaries who saw in the growing helplessness of the tenant a way to strengthen their own position without making any contribution to the maintenance or improvement of the productivity of the land. Consequently, a complicated chain of proprietary and sub-proprietary rights in land was built up. There was an increase of 62 per cent in the number of rent farmers between 1921 and 1931, and since 1931 there has been a further process of sub-infeudation below the statutory raiyat. At the same time, a steady reduction took place in the number of actual cultivators possessing occupancy rights and there was a large increase in the number of landless labourers. Their number increased by 49 per cent between 1921 and 1931. They constituted 29 per cent of the total agricultural population.²⁴

The same problem of intermediaries arose even under the Mahalwari and Ryotwari systems, where ordinarily the landholder was expected to be the cultivator. Thus, in the Punjab, 7.3 per cent of the cultivated land was farmed by occupancy tenants and about 48.2 per cent by tenants-at-will. The general consensus of opinion as recorded by the Punjab Land Revenue Committee was that "the ordinary tenant with one or two ploughs does not often earn more, and may in places earn less than the permanently hired agricultural labourers."²⁵ The unequal distribution of the ownership of land implies the divorce of ownership from cul-

23 "Where his land has passed into the possession of the creditor, no legislation will serve his need; no tenancy law will protect him; for food, he needs land and for land he must plead before a creditor to whom he probably owes more than the total value of the whole of his assets. That creditor is too often a landlord of a different class, who has no natural or historical connection with his estate and is only interested in the immediate exploitation of the property in his control"—Report of the Royal Commission on Agriculture in India, p. 433.

24 Report of the Land Revenue Commission, Bengal, Vol. I, p. 37.

25 The Report also points out that about 61 per cent of the cultivated area of the Province belonged to only 15 per cent of the owners. *Op. cit.*, p. 34.

tivation and indicates correspondingly the magnitude of the tenancy problem. In Bombay, apart from the *talukdari* and *khoti* tenures which were of the nature of zamindari tenures, one-third of the cultivated area belonged to landlords who received rents without directly or indirectly taking part in the cultivation.²⁶

On the whole, taking the zamindari as well as the ryotwari areas, about 75 per cent of the cultivated area was estimated to be cultivated by tenants with varying degrees of rights and liabilities. The rents paid by these tenants were in most cases exorbitant. The tenants were required often to render a variety of personal services of a semi-feudal type to the landowner. The practice of crop-sharing prevailed over a large part of the country. Though this system had its advantages in early days, the subsequent developments hardly left even a subsistence level of income to the tenants on this basis.

Tenancy reform was one of the major programmes of work undertaken by the popular ministries after the grant of Provincial Autonomy. The main objects of this reform were: (1) to put a limit on the permissible enhancement of rents; (2) to prevent arbitrary ejectments; (3) to confer occupancy rights on tenants so as to make land heritable and sometimes alienable; (4) to place restrictions on the right of distraint for arrears of rent and to grant exemptions in case of attachment, in respect of cattle, tools, and seeds; (5) to provide that suspensions of land revenue should also benefit the tenants through suspension or reduction of rents; (6) to provide for compensation to the tenant for any improvements he may make on the land; (7) to protect the tenant from 'veth' and other burdensome impositions, etc. Attempts were thus made by a series of legislative enactments to rectify the errors of the early land settlements, which were aggravated by a number of economic factors operating over a century.

LEGISLATION IN STATES

The measures of tenancy reform in some of the States upto 1938-39 are briefly reviewed in the paragraphs below.

In Bengal, the legislation conferred certain rights on tenancy holders and under-ryots.²⁷ The right of the landlord to

²⁶ Land Revenue Administration Report, Bombay, 1936-37.

²⁷ Bengal Tenancy Amendment Acts of 1938, 1939 and 1940.

pre-emption in the case of sale of occupancy holdings was taken away, enhancement of rent was forbidden, the rate of interest on arrears of rent was reduced to $6\frac{1}{2}$ per cent, certain occupancy holdings under usufructuary mortgage were reverted to the ryot after a specified period and exactions like the *abwab* were made illegal. However, the protection conferred by the Act did not extend to the *bargadars* or crop-sharers, who were merely tenants-at-will. The grant of limited occupancy rights to the crop-sharers and a reduction of the share payable by them from one-half to one-third were among the recommendations made by the Bengal Land Revenue Commission. Even after this relief, the rent payable was estimated at $5\frac{1}{2}$ times as much as was payable by the ryot and $2\frac{3}{4}$ times that payable by the under-ryot. Thus the problem was one which required a re-adjustment of the very basis of Bengal's tenurial system.

In Bihar²⁸ also, the legislation provided for similar protection to the ryot but failed to touch the problem of relief to crop-sharing tenants who cultivated nearly 20 per cent of the cultivable area of the province.

In U.P.,²⁹ the tenancy laws were more radical. They diminished considerably the privileges of the landlords. The extent of "Sir" lands which the landlord could retain were drastically reduced, the rules regarding ejectment and distraint were tightened up; rents were reduced. However, the evil of share-cropping remained.

In Madhya Pradesh,³⁰ in the former C. P. area, the legislation went a step further and afforded protection against eviction or enhancement of rent to the actual cultivating tenant. There were provisions to make the rights of the occupancy tenant as well as the ordinary tenant inalienable and in 1920, the distinction between

28 The Bihar Tenancy Amendment Act, 1939; the Bihar Tenancy Amendment Act, 1938; the Bihar Restoration of Bakasht Lands and Reduction of Arrears of Rent Act, 1938; the Chhota Nagpur Tenancy Amendment Act of 1938; the Champaran Agrarian Amendment Act, 1938; the Bihar Tenancy Amendment Act, 1940; and the Chhota Nagpur Tenancy Amendment Act, 1940.

29 The U. P. Tenancy Act of 1939.

30 The C. P. Tenancy Act of 1898; Amendment Acts of 1938 and 1939.

these two categories of tenants was abolished. Thus in this area, even before the tenancy legislation of 1938-39, there was less variety and diversity in forms of tenure and the protection to the peasantry was more effective³¹ than in other Provinces. By the Amendment Act of 1939 the "absolute occupancy tenants" and "occupancy tenants" were given the right to transfer any right in their holdings by simple mortgage, to sublet for a period not exceeding 5 years and to bequeath, without any reference to the landlord. It was also provided that a sub-tenant could be declared an occupancy tenant if land was habitually sub-let.

In Madras, the shortcomings of the Rent Recovery Act of 1865 were sought to be rectified by the Madras Estates Land Act of 1908 which tried to define and delimit the rights of the cultivators and of the landholders. But the Act failed to grant the necessary protection to the tenants. The question was taken up only in 1937 and the recommendations of the Madras Estates Land Act Committee (1938) were accepted for adoption by Government as the basis of reform. The Committee emphasised the need for replacing the Act of 1908, for declaring the rates of land revenue fixed in the year previous to the Permanent Settlement as fair and equitable and for issue of permanent *pattas* of land to the ryot fixing rates of land revenue permanently as above. No attempt was made to deal with the tenancy problem in the ryotwari areas. Even in zamindari and proprietary areas the line of action taken was legalistic and conservative. The reform proposed was, in effect, a reversion to the *status quo* before 1802. The ryots on whom the right of ownership was to be conferred were not necessarily actual cultivators but only rent-receivers. This was lost sight of. The rights of the sub-tenants were not also considered. The adoption of pre-1802 assessment as the equitable rent clearly amounted to a refusal to lay down principles for determining fair rent in the light of the conditions obtaining at the time. In the end the Bill had to be dropped and the problem of tenancy in the zamindari as well as the ryotwari areas was left to be tackled more seriously in the future.

In Bombay, the Tenancy Act of 1939 created a class of

³¹ Article by D. R. Gadgil, "Tenancy Laws in India," *'Servant of India,'* March 23, 1939.

"protected tenants"³² and conferred on them the benefits of (i) reasonable rent, (ii) freedom from eviction, (iii) compensation for improvements on the land in case of eviction, (iv) continuance of tenancy after death on the same terms and conditions, (v) in the event of partial or total remissions of land revenue, proportionate reductions in rent, and (vi) freedom from 'veth' or illegal charges.

The Act was, on the whole, a bold measure designed to confer substantial rights on the tenantry while safeguarding the legitimate interests of landlords. But "reasonable" rents were defined too vaguely. Since the continuous occupation of land for a certain number of years was a condition precedent to the accrual of tenancy rights, there was a possibility of the landlord managing to shift the tenants to different holdings or removing them altogether before they became entitled to the permanent status. There was also no provision for automatically safeguarding the rights of tenants in future with the extension of the practice of tenancy. Above all, the Act was enforced only in a few selected areas.

REVIEW OF TENANCY POSITION

The survey of tenancy legislation upto 1938-39 indicates the seriousness of the tenancy problem that existed practically all over the country. It brings out also its complexity which did not admit of an easy solution. Tenancy legislation in all the provinces where it had been enacted generally aimed at granting the benefits of the three F's—fixity of tenure, fair rents and free transfer—to tenants. As a result, the privileges of the landlord were no doubt considerably curtailed, but the benefit of the legislation did not reach the actual cultivator. Tenants-at-will and share-croppers received no protection.

Radical tenancy legislation implied dispossession of the old vested interests ; and this, as experience showed, was always a difficult matter. However, the general consensus of opinion was that the agrarian problem could not be solved unless the

³² A 'protected tenant' is defined as one who has land continuously for a period of six years immediately preceding 1st January, 1938, and has cultivated it personally. Tenants evicted after 1st April, 1937, were also to be deemed 'protected tenants' on certain conditions.

functionless and parasitic landlord system was abolished, or at least controlled, and transfers to sub-tenants were effectively checked, so that the actual cultivator was given a better legal status. At the same time, it was no solution to confer tenancy rights on small holders, whose cultivation could not possibly bring adequate returns and who, therefore, could not hold lands for long.

It was made clear by experience that tenancy legislation, to be really effective, must embrace all classes of tenants, and it must at the same time, disallow transfers or sub-letting of lands except with the specific permission of duly constituted authority. Such permission may be granted whenever there is a legitimate case, as for example, when the owner is leaving the village or the land is transferred so as to enable the new holder to cultivate it jointly with his old holding on a more economical basis. In other words, the problem was not one which could be solved merely by preventing the grosser abuses of unprotected tenancy. It was necessary to go to the root causes of the growth of tenancy and to see that lands did not pass from the hands of genuine cultivators to mere "rentiers", on the one hand and ill-equipped sub-tenants, on the other, who simply could not utilise them on an economical basis. Thus tenancy legislation was only a palliative under the prevailing conditions of tenurial relationships, not a cure. The agrarian problem was too intricate to be solved by tenancy legislation alone. It demanded an overhaul of the system of land tenures and tenancies and the development of a more efficient system of land management.

LAND REFORMS (1938-39 TO 1950-51)

The normal process of land reform was interrupted for nearly seven to eight years by World War II and the Partition. After the war, the All-India Congress Committee took up the question again. On a review of the position in the various States, it laid down the following objectives as the basis for legislative enactments.

- (1) elimination of intermediaries between the tiller and the State ;
- (2) elimination of middlemen and their replacement by a

non-profit-making agency, such as co-operatives ;

- (3) remunerative prices for basic agricultural products and achievement of living wage levels for agricultural workers.

Within this broad policy, it was held that land should be occupied only for use and as a source of employment. Therefore, the lands belonging to non-cultivating landholders or to others, who were not for any period able to exercise the right of cultivating them should vest in the village community, the original holder or his successor being entitled to take possession of the land for personal cultivation only. The fixation of a maximum limit to the total holding was also suggested.

In 1948, the Agrarian Reforms Committee of the Congress prepared a report covering almost every aspect of the agrarian economy. It emphasised that in the agrarian economy of India, there was no place for intermediaries and that land should belong to the tiller subject to conditions which would ensure its best utilisation. The Committee further recommended that in future sub-letting of lands should be prohibited, except in the case of land owned by widows, minors and disabled persons. To cover the period of transition, it recommended the conferment of certain rights on the actual tillers who were themselves not owners. Tenants were also to be helped by suitable financial assistance to acquire the ownership of holdings of adequate size. Though the Committee recommended more than one type of farming, it adhered to a uniform set of basic objectives, *viz.*, elimination of exploitation of one class by another, increase in efficiency of production to the maximum, and land reforms within the realm of practicality. The principle of distributive justice could be applied in agriculture by placing a ceiling on ownership of land, the maximum permissive holding being 3 times the size of the economic holding in a given region. The rights in land should be shared between the community and the tiller so that maximum utilisation as well as conservation would be assured. To achieve this end, the cultivator's rights in land though permanent, transferable and heritable should be so restricted as to prevent sub-letting of land, land speculation and bad husbandry.

The legislative measures adopted by State Governments in

furtherance of the above objectives of policy are outlined in Appendix I.

In the pre-Plan period nearly two-thirds of the land in India was cultivated by persons who did not own the land. In the case of many of these, there may have been anything between 1 to 10 intermediaries, with varying proprietary and other rights and sharing the rent paid by the actual cultivator in varying proportions. The reforms, therefore, related to two aspects of the problem : (1) legislation for removal of the intermediaries, and (2) legislation for the protection of tenants and regulation of tenancies. Though in some States there was separate legislation for the two aspects of reform, in others, the same legislation covers both aspects. The protection which the actual tiller of the soil needs is mainly of two types, protection against rack-renting and illegal exactions and protection against unlawful eviction. He also needs to be provided with facilities for purchasing the plot of land that he is cultivating. In 1950, the amount of compensation payable for acquisition of zamindari rights was estimated at Rs. 444 crores. Thus there remained millions of tenants who were unprotected and at the mercy of intermediaries. Moreover, even those who were legally protected were not in a position to enforce their rights because of their weak economic position.

Agricultural Labour

A word may be said here regarding agricultural labour. This section of the rural community constitutes the lowest rung of the economic ladder, and amelioration of their economic condition presents one of the most difficult problems of the Indian rural economy. With a view to preventing exploitation of this class, the Government of India enacted in 1948 the Minimum Wages Act which required State Governments to fix minimum rates of wages for agricultural labour before the expiry of three years from the commencement of the Act. Rates of minimum wages have been fixed under the Act only in some of the States as the Punjab, Delhi, Himachal Pradesh, U.P., Bihar, Assam and Rajasthan. In the U.P., the rates have been fixed only for organised farms of 50 acres or over and in Kutch, farms of 5 acres and below have been exempted.

Such legislation, while useful for preventing exploitation of labour in particular areas or under particular circumstances, cannot, it must be recognised, solve the problem of low wages all round ; for, in the last analysis, it is only through an increase in employment and in productivity that the standard of earnings for agricultural labour can be raised. Progress in this sphere is thus bound up with the larger problem of economic development.

Similarly, with regard to agrestic serfdom, though the Constitution prohibits employment of serf labour, it is too much to expect that such serfdom will be eliminated in reality. Legislation can assist, but concentrated effort is necessary for removal of the basic economic deficiencies which make for low incomes, exploitation and iniquity in distribution.

(LAND REFORM—PLAN PERIOD (1950-51 TO 1955-56)

In the Plan period, the problems of land reform were viewed as part of a national agricultural policy. The aim was to change suitably the structure of the rural economy with a view to promoting agricultural development while at the same time satisfying the canons of social equity as between the different interests in land. The tenurial and tenancy reforms, therefore, concerned themselves mainly with the following interests : (1) intermediaries, (2) large owners, (3) small and middle owners, (4) tenants-at-will and (5) landless workers. Though the process of abolition of intermediaries began prior to the First Plan, the greater part of the task was accomplished in the plan period from 1951 onwards. The position by the end of the First Plan period was that the first stage of abolition of intermediaries was completed almost entirely throughout the country.

The abolition of intermediaries was a great step forward, and it was carried through on the basis of compensation for those dispossessed. The total compensation payments are estimated at Rs. 615 crores, Rs. 379 crores for regular compensation, Rs. 86 crores for rehabilitation grants and Rs. 150 crores for interest payments. Of the total amount, Bihar accounted for Rs. 240 crores, Uttar Pradesh for about Rs. 178 crores, West Bengal for Rs. 59 crores and Rajasthan for Rs. 36 crores, totalling Rs. 513 crores or about 83% of the total amount of compensation. The two determining principles applied in fixing the rates of compensation were that total compensation

should be financed out of the increases in revenues accruing to State Governments on the abolition of intermediaries and that the intermediaries in the lower income group who constituted the majority should be apportioned adequate compensation. Generally, the compensation was fixed as a multiple of the net income accruing to an intermediary at the time of acquisition, the multiple being higher in the case of low-income groups. Where the basis of a uniform multiple of net income was adopted, provision was made for a rehabilitation grant to low-income groups. Compensation was payable in cash or in bonds redeemable over varying periods, 40 years in Bihar and Uttar Pradesh, 20 years in West Bengal and 15 years in Rajasthan. The payment made up to the end of 1954-55 amounted to only Rs. 67 crores of which Uttar Pradesh alone accounted for Rs. 44 crores.

With the abolition of intermediaries, Government has come in possession of large areas of forest and waste lands. The efficient management and development of these lands present a fresh problem. Certain administrative problems also arose from the abolition of intermediaries : preparation of a record of rights and provision of trained staff for the implementation of the legislation.

The Plan distinguished the substantial owners of land from the middle and small owners and tenants-at-will. In regard to the first, the policy was to have an upper limit to the amount of land which an individual might hold. Immediately, however, the recommendation was for a limit on future acquisition as also a limit for resumption for personal cultivation. For the imposition of a ceiling on existing holdings, a distinction had to be made between land under cultivation of tenants-at-will and that under the direct management of owners. For the former, the proposal was that they should become the owners of land they cultivated. As regards the latter, the principle of imposing an absolute ceiling was favoured. The ceiling was to be fixed after a special census of land holdings and cultivation with reference to the agrarian history and local conditions of the different States had been undertaken. The case of small and middle owners was considered on the basis of their claims over the tenants. The resumption of land for personal cultivation alone was permissible within a specified period. The period of tenancy was fixed ordi-

narily at 5 to 10 years. Rents were reduced to one-fourth or one-fifth of the produce.

While tenancy legislation throughout its long period of history had attempted to confer security of tenure and provide for regulation of rents in the zamindari areas and for regulation of relations between the landowners and cultivating tenants in the ryotwari areas with a view to safeguarding the interests of the latter, in actual fact, tenants and sub-tenants enjoyed very limited protection. In the background of this experience, in the First Plan period, fresh legislation was undertaken to fill up the gaps and make the legislation more effective and its implementation practicable. Details of the progress of legislation in the various States are given in Appendix II to this chapter.

REVIEW OF PROGRESS

The main features of land reform, tenurial and tenancy, in the Plan period may be summarised as follows :

Security of Tenure

Legislation during the period of the First Five-Year Plan and the first year of the Second Plan has sought to bring about greater security of tenure in different States. But the progress in the States is not even. Some States have gone ahead of others. The form which legislation has taken has also differed according to local conditions and the progress already made before the Plan period. In some States such as U.P. and Delhi all tenants have been given full security of tenure. In U.P., tenants were brought into direct relationship with the State on condition of payment for the acquisition of *bhumidari* rights. In Delhi, the tenants are required to pay compensation at rates varying from 4 to 40 times the land revenue spread over a period of 10 years. In others such as Bombay, Punjab, Rajasthan and Himachal Pradesh, the tenant has been given a limited security of tenure subject to landlord's right to resume a limited area for personal cultivation. The limitation on the security of tenure differs from State to State. In most States the landlord's right to resume is subject to a maximum limit. In some of the States there is also a provision entitling the tenant to retain a minimum area for cultivation. In Bombay, the tenant can retain half the area. In Punjab, he can retain 5

standard acres and can be ejected from this area only when alternative land is provided by Government; in Rajasthan, a minimum holding with a net income of Rs. 1,200 can be retained, and in Himachal Pradesh, three-fourths of the area held is retained. The landlord's right to resume land for personal cultivation is also limited, in Bombay to 3 minimum holdings (12 to 48 acres), in the Punjab to 30 standard acres, in Rajasthan to the extent of the area in excess of the minimum holding left with the tenants, in Himachal Pradesh to an area of 5 acres and in Hyderabad to 3 family holdings (12 to 180 acres depending upon the class of land). Where the owner held land less than a basic holding, resumption can be of the entire area. In Assam, the limit for resumption for personal cultivation is $33\frac{1}{3}$ acres, in Berar of Madhya Pradesh 50 acres, Orissa 7 to 14 acres, Jammu and Kashmir 2 to 6 acres, and in Kutch 50 acres. In States like Kerala and Madras, ejection of tenants has been stayed pending legislative action for their protection.

The variations in the rights conferred on the tenants in the different States and the frequent amendments have to a large extent defeated the objectives of land reform. The difficulties in the definition of 'personal cultivation' have led again to resumption of sizeable lands by owners under the pretext of voluntary surrenders. Thus the security afforded to the tenant appears to have remained incomplete. It does not also seem easy for the tenants to establish their rights as many of them do not know the provisions or the benefits conferred under the enactments.

Rent Reduction

In almost all the States, provisions for the scaling down of rents are included in the legislation. As a general standard $\frac{1}{4}$ th or $\frac{1}{5}$ th of the produce is recognised as justifiable. But the variations in the rates fixed in relation to the above standard do not admit of rational explanation on economic and social conditions. The following table gives an idea of the effort made in this direction.

<i>State</i>	<i>Reduction Effected³³</i>
Assam	.. $\frac{1}{4}$ to $\frac{1}{5}$ th (crop-share)
Bombay	.. $\frac{1}{3}$ rd (dry land) } to $\frac{1}{6}$ th for all types
	.. $\frac{1}{3}$ rd (Irrigated) }

³³ *Vide Review of the First Five-Year Plan, 1957, p. 321.*

Orissa	..	1/2 to 1/4th			
Andhra	..	1/2 the gross produce			
Hyderabad	..	1/3 Irrigated land	} to 1/4 } respectively	1/5 }	
	..	1/4 dry land			
Rajasthan	..	1/4 to 1/6			
Mysore	..	1/2 (1952) to	{ 1/3— <i>maidan</i> areas		
			{ 1/4— <i>malnad</i> areas		
Delhi	..	1/5th maximum of gross produce			
Himachal Pradesh	..	1/4th maximum of gross produce			
Punjab	..	1/3rd of gross produce			
Bihar	..	7/20 of gross produce			
Madras	..	from 60% of gross produce (Tanjore District)			
		to 33 $\frac{1}{3}$ —40% (1955-56) for entire State			
Jammu and Kashmir	..	1/2 and 1/3rd of gross produce			

As in the case of security of tenure, considerable difficulty is reported to be experienced in the regulation of rents, particularly of crop-share rents. Therefore, in Bombay and Hyderabad, the maximum rent is fixed as a multiple of land revenue.

Ownership Rights

Experience has revealed that the optional right of purchase is seldom exercised, unless the State Government, as in Uttar Pradesh and Saurashtra, organised an administrative drive and persuaded the tenants to acquire ownership on payment of compensation. In Saurashtra, credit was also provided through the land mortgage bank to enable tenants to acquire ownership rights. From the extent of land purchased by tenants and the number of tenants who had the capacity to acquire ownership rights, the results do not appear to be satisfactory. The main question which is posed is the extent of the burden on the tenant by the stipulation of payment of compensation either in instalments over a period or as a small annual rent to the land-owners, retaining possession of permanent rights. The intriguing problem is whether the extent of resources which the tenant could apply to improvement of land would not be diverted to the purchase of ownership rights and thus affect the efficiency in cultivation. The Second Five-Year Plan has taken note of this complexity and has, therefore, recommended that tenants of non-resumable areas should be brought into direct relationship with

the State but the total burden including land revenue and instalment payments towards purchase-price should not exceed the level of rent prescribed. Even this view which appears to recognise the weak resource position of the tenants, requires to be examined in the light of the fundamental limiting condition, namely, that the aggregate amount of compensation and interest should be fully recovered from the tenants so as to avoid placing an additional financial burden upon the State Governments.

Ceiling on Holdings

The First Five-Year Plan recommended the principle that there should be an absolute limit to the amount of land which an individual may hold. In the Second Five-Year Plan, an indication was given as to the factors which should be taken into consideration in determining whether there were categories of farms to which the ceiling need not be applied. Among the specific categories which the Plan suggested should be exempted were plantations, orchards, specialised farms, sugarcane farms operated by sugar factories and efficiently managed farms which consist of compact blocks and whose break up is likely to lead to a fall in production. These principles have been generally followed as a basis for tenurial legislation in all States. Ceiling on future acquisition of lands have been fixed in the following States.

Assam	..	..	50 acres
Bombay	..	..	12 to 48 acres (3 economic holdings)
Uttar Pradesh	..	..	30 acres
West Bengal	..	..	25 acres
Andhra: Hyderabad	..	..	12 to 180 acres (3 family holdings)
Jammu and Kashmir	..	..	22 $\frac{3}{4}$ acres
Madhya Pradesh	..	..	50 acres
Pepsu	..	..	30 standard acres (40 acres for displaced persons)
Saurashtra	..	..	3 economic holdings
Delhi	..	..	30 standard acres

Legislation has also been enacted in a few States in respect of ceilings on existing holdings. Jammu and Kashmir takes pride of place in being the first State to impose a ceiling on existing holdings which was kept at the same level as that on future acquisition. No

compensation was paid for the vesting in government of lands held in excess of ceiling. In Hyderabad, legislation was enacted in 1954 fixing the ceiling at $4\frac{1}{2}$ family holdings; the ceiling was applied only to farms the break up of which would not lead to a fall in production. In order to determine the farms to which the ceilings would apply standards of efficiency were drawn up. These however still need to be imposed. It is reported that on account of transfers and partitions the estimated 'surplus' (land held in excess of ceilings) has been reduced considerably during the last few years. In Punjab, powers were taken by the government under the tenancy legislation to take over land in excess of 30 standard acres (50 standard acres in the case of displaced persons) for settling tenants who might be ejected when owners resume land for personal cultivation. This was necessary because in Punjab tenancy legislation it is provided that a tenant shall not be ejected from a minimum area of 5 standard acres until he is provided alternative land by the State Government. Ceilings on existing holdings have also been included in the legislation of Assam, West Bengal, Himachal Pradesh, Pepsu and Ajmer. The ceilings are as indicated below:

Assam	50 acres (mechanised farms not exceeding $166\frac{2}{3}$ acres exempted from ceiling)
West Bengal	25 acres
Himachal Pradesh	30 acres in the district of Chamba and area assessed to Rs. 125 in other districts.
Pepsu	30 standard acres (40 standard acres for displaced persons)
Ajmer	50 standard acres

In Bihar, a bill providing for ceiling at 25-75 acres was reported upon by a Select Committee in 1956 but was not enacted before re-organisation of the State. The bill has since lapsed. Revised proposals are under formulation. In Kerala also, the bill which was promoted before re-organisation was given up and new proposals are under construction.

Although considerable progress has been made in the enactment of legislation for land reform, it cannot be said that the problem has been satisfactorily solved either in terms of providing an efficient system of land use and management or in terms of evolving a stable social structure in rural areas. The objectives of land reform, according to the Second Five-Year Plan, are: 'firstly, to remove such impediments upon agricultural production as arise from the character of the agrarian structure; and secondly, to create conditions for evolving, as speedily as possible, an agrarian economy with high levels of efficiency and productivity.' The legislative reforms of the last ten years have only cleared the ground, as it were for the more positive steps which will have to be taken to attain the above objectives. Moreover, legislation is one thing, implementation of the reforms, another. Many obstacles arising from the age-old rigidity of the rural social structure come in the way of speedy and satisfactory implementation of the new legislation. In a number of cases the protection given to the tenant has not benefited him in practice because of the right of resumption given to the landlord the exercise of which has converted the tenant into an agricultural labourer and the landlord into the so-called 'personal cultivator'. In anticipation of legislative reforms, large-scale evictions and transfers of land have taken place with a view to defeat the provisions of law. From a broader point of view the immediate impact of the spate of land reform legislation must have been to reduce productive efficiency. Land reform measures should, therefore, be accompanied by appropriate steps to increase the productivity of agriculture by promoting more efficient system of land use. A greater degree of co-ordination in the activities of various State Governments in the field of land reforms is also necessary. A beginning in this direction can be made through the Central Committee of Land Reforms, consisting of the members of the Planning Commission and the principal Central Ministers concerned, which reviews from time to time the measures taken by the State Governments.

APPENDIX I

LEGISLATION IN STATES—PRE-PLAN PERIOD (1938-39 TO 1950-51)

Andhra Pradesh

The problem of land hunger and peasant poverty was particularly acute in the region of the former Hyderabad State. Agrarian upheavals were noticed frequently. In fact, the *Bhoodan Movement* of Acharya Vinoba Bhave had its birth in the Telengana district where the evils of absentee landlordism were pronounced. Over 20 million acres or nearly 60 per cent of the area of the former State were under ryotwari tenure which recognised the right of transfer. In the process of land transfers, there was excessive concentration of land in a class of moneylenders and non-cultivating landowners. The Agrarian Reform Committee, 1949, reviewed the working of the laws for the amelioration of the condition of the agriculturists and recommended far-reaching reforms. These recommendations have been the basis of the agrarian enactments of the region. The Government decided to remove the *jagirdars*, *izaradars* and other similar type of holders in the State. The Hyderabad (Abolition of Jagirs) Regulation, 1949, and the Hyderabad Jagirs Commutation Regulation, 1950, prescribed the process for the abolition of this type of tenure and the payment of compensation. The total sum payable towards the commutation of *jagirs* was estimated at Rs. 17·71 crores. This sum was to be distributed among the *jagirdars*, *izaradars* and others numbering more than 10,000. The payment was to be in 10 to 15 equal instalments according to the quantum of commutation amounts or annual revenue.

The more pressing problem in the State was that of giving security to the vast majority of unregistered tenants—the *Shikmidars* and the *Asami Shikmis*. The *Shikmidars* according to the Land Revenue Act were practically considered as having proprietary interests in land except that land could revert to the *pattadars* in case the *Shikmidars* failed to pay the land revenue to Government. The *Asami Shikmis* are tenants cultivating land on payment of rent either on the basis of *batai* or crop-share or fixed grain rent or money. The

Hyderabad Tenancy and Agricultural Lands Act (1950) envisaged a pattern of peasant-proprietorship removing the existing inequalities in land, so that agricultural efficiency and production may increase. The Hyderabad Prevention of Eviction Ordinance, 1952, was an interim measure for effectively implementing the provisions of the previous Act and preventing the spate of evictions which followed the enactment of this legislation.

Assam

Out of a total cultivable area of 7·7 million acres, the permanently settled area covered 1·7 million acres. In the hill districts, the system of cultivation being *Jhumming* or migratory, the tenure was governed by tribal custom. Each household was allowed to cultivate the land it required on payment of a hoe-tax or house-tax as revenue, varying from Rs. 2 to Rs. 5. In the ryotwari areas, land was settled either for special cultivation or ordinary cultivation; there were special revenue paying estates, such as *Lakhiraj* and *Nisfkhiraj*. Among these, sub-letting was common. Some of the *Khiraj* estate holders also let out the whole or part of their land to tenants on rent or on crop-sharing basis. In the first phase of the Zamindari abolition, only estates and tenures with a gross annual income exceeding Rs. 50,000 were taken over.

Bihar

In Bihar, there were three distinct tenancy laws for the whole State. There was first the need for enacting a consolidated tenancy law for the whole State. After 1949, various amendments were made to the existing tenancy laws with a view to giving effective protection to the tenants under these Acts. The main provisions of the amendments were : (i) a settled ryot of the village cultivating any *bakasht* land of the landlord would immediately get occupancy status, provided that he had no such rights in any *bakasht* land settled with him by a proprietor or a tenure-holder whose total holding did not exceed 40 acres, unless the settlement was made by a registered document,¹ (ii) in settling the *bakasht* land the landlord should prefer residents of the village

¹ The term *bakasht* means any land other than the proprietor's private land as defined in Section 120 of the Act VIII of 1885 which was, for the time being, in the cultivating possession of a proprietor or tenure-holder.

or the neighbouring villages ; (iii) the rent should not be fixed above 10 per cent of the average village rate ; (iv) the *salami* should not exceed 10 times the rental ; (v) occupancy tenants would have full rights of excavating tanks and wells and of constructing buildings on their own use, and also for religious and charitable purposes ; (vi) a share-cropper would get 11/20th of the produce of the land plus the straw and the landlord will get only 9/20th.

Apart from these, the Bihar Bakasht Dispute Settlement Act, 1947, would settle by arbitration disputes over *bakasht* lands between landlords and ryots ; the Ranchi District Aboriginal Ryots Agricultural Land Restoration Act, 1947, restored the holdings to ryots who failed to pay rent during the freedom movement and therefore, whose tenancies were sold ; the Bihar Privileged Persons Homestead Tenancy Act, 1947, prevented possible ejection of Harijans, artisans and other persons from their homestead. Unlike the rights of the occupancy ryots under the Bihar Tenancy Act, 1950, in Chhota Nagpur and Santal Parganas, the right of transfer by aboriginal and scheduled caste ryots was restricted so as to prevent their lands from passing into the hands of the moneylenders.

Bombay

The problem of abolition of the intermediary system in Bombay was comparatively a simple process and was effectively tackled by the State Government. Various tenure-holders, such as *Khots*, *Talukdars*, *Maliks*, *Mehwasdhar*, *Bhagdars*, *Narwadars* enjoyed certain special privileges and rights in matters of land and land revenue. The *Bhagdar* and *Narwadar* tenures were mere modes of collecting land revenue. All these tenure-holders were mostly revenue farmers and collectors of revenue during the pre-British period. They had come into the possession of property rights and status to which they could not establish their claim in the course of the last century. In 1948, the Government of Bombay took up the question of reforming these tenures and subsequently enacted legislation to liquidate the special privileges of these tenure-holders without acquiring their lands or interests therein. Thereby, they were able to abolish the old tenures with practically little administrative rearrangement or cost to themselves and without causing distress to the tenure-holders.

Bombay was also the first State to attempt legislative control of tenancy conditions in the purely ryotwari areas. As early as 1938, the Government showed an awareness of the problem of concentration of land ownership and rack-renting which deprived the actual tiller of all initiative and incentive for improved agriculture and which resulted in the deterioration and stagnation in agricultural production. The Bombay Tenancy Act, 1939, has been recognised as a piece of progressive tenancy legislation and has served as a model for other States. Prior to this Act, the relations between landlords and tenants in Bombay were governed by the Bombay Land Revenue Code, 1879. Under the 1879 Code, tenants had no fixity of tenure or protection against rack-renting. Tenants cultivating the same land for generations continued to be tenants-at-will with consequent adverse effects on cultivation. The Act sought to remedy these defects and was extended to cover the whole Province in 1946.

The Bombay Tenancy and Agricultural Lands Act, 1948 aimed at (1) giving the tenants fixity of tenure; (2) rights in trees, rental, house-sites; (3) commutation of crop-sharing into cash; (4) abolition of various cesses of an obnoxious nature levied under custom or usage and (5) suspension and remission of rent under certain circumstances. Efficient cultivation is sought to be achieved by (1) prohibiting subletting and sub-division, (2) encouraging co-operative societies, (3) assuming management by Government of landholders' estates in the case of disputes between landlords and tenants or for ensuring fuller utilisation of land, (4) prohibiting transfer of agricultural land to non-agriculturists and determining priorities in the matter of transfer of lands, (5) enabling a protected tenant to purchase land of a landholder at a reasonable price payable in instalments, (6) assuming management of land lying uncultivated for any two cultivating seasons, (7) acquiring any estate or land under management and (8) restricting resumption of land held by a protected tenant for personal cultivation or non-agricultural use by a landholder.

Under this Act, three categories of tenants are recognised : (1) permanent tenant, (2) protected tenant, and (3) ordinary tenant for 10 years. The permanent tenants would continue to enjoy

rights and privileges as before ; the protected are those who held land continuously for a period of not less than 6 years immediately preceding either 1st January, 1938 or 1st January, 1945 and had cultivated such land personally during the aforesaid period ; tenants holding lands for one year on 8th November, 1947 and tenants evicted after 1st April, 1937 or 1st April, 1949 who were personally cultivating land for a period of not less than 6 years. These tenants are given special rights to purchase land at a reasonable price to be determined by the tribunal. The price is payable in lump or in instalments not exceeding 10, within a period of 15 years. The right to purchase the lands is hedged with certain conditions. The Act, in its amended form, introduced a new concept of agricultural holding which means 16 acres of *jirayat* land or 4 acres of irrigated land. Provisions were made regarding the extent of the agricultural holding which can be resumed for personal cultivation. The maximum rents payable by the tenants were fixed at one-sixth of crop.

In the region of the former State of Saurashtra, the land was owned by the rulers or their grantees called *girasdars* or alienees and the *barkhalidars*. The farmer, including the many variants of this title, held land with proprietary rights. The *barkhalidars*, including the several variants under this title, were merely entitled to the usufruct of the land granted to them, implying the independent enjoyment of the produce. Rent was paid in kind and for the purpose of apportionment of government revenue, all the produce were first to be brought to the threshing floor, except in the case of the land of *barkhalidars*. The number of all landholders was 51,278, of which *girasdars* numbered 32,480. The total area of holding of alienated lands was 36,31,342 acres of which the *girasdars* held 28,84,117 acres. The inhuman exploitation of the peasantry, with high rents, as much as 50 per cent crop-share, *veth*, or forced labour and all kinds of feudal levies, was a characteristic feature of the system.

The Saurashtra Land Reforms Act, 1951, the Barkhali Abolition Act, 1951, and the State Acquisition Act, 1952, aimed at the abolition of *girasdari* tenure, *barkhali* tenure, and the acquisition of all non-agricultural land and assets of the tenure holders. The compensation payable would be by the tenants, as well as by the

Government, the former paying 6 times the cash assessment fixed for the land and the latter 15 annual instalments equivalent to land revenue recoverable from the tenant. The amount payable by the tenant was estimated at Rs. 33·6 million. The *barkhalidars*, being assignees of land revenue, would receive no compensation but only rehabilitation grants along with *girasdars* of less than 800 acres. The State also abolished all kinds of feudal levies and converted the system of crop-share into cash assessment.

Kerala

In the Malabar area, the land holding was based on a more organised system of tenures from the *jenmi* to the absolute proprietor, the *kuzhikanam* or the lease on fixed terms, ranging for a minimum period of 12 years subject to renewal, and the *verumpattom*, a simple lease covering only a single year. There was also another type of tenure called *panayam* under which possession of land was made over as security for the money loaned. In the case of the *kanam* type of tenure, the tenancy rights were transferable and the leases were not affected by the death of the contracting parties, provided there were surviving members on either side.

The Malabar Compensation for Tenants' Improvement Act, 1887, amended and re-enacted in 1900 ensured to the tenant on eviction compensation for the improvements effected by him. The Malabar Tenancy Act of 1929 which came into force in 1930 reduced the scope for arbitrary eviction of the tenants by conferring a qualified fixity of tenure on cultivating *verumpattomdars* and a right to demand the renewal of the leases on *kanamdars* and customary *verumpattomdars*. The Act also gave tenants of homesteads the right to purchase the holding, if they had been in continuous occupation of the same for not less than 10 years. The rates of fair rent in respect of wet, garden and dry lands were fixed. As the provisions of this Act proved to be defective in certain respects, the Madras Tenants' and Ryots' Protection Act was enacted in 1946 to give temporary protection against eviction of such of the tenants to whom the previous Act applied. Though the system of land leases in South Kanara had some similarities with the system in Malabar, there were distinguishing features. The lease was perpetual under a fixed rent. The tenant called *Mulgenidar*

became virtually the landholder, subject to the payment of the fixed rent ; the ordinary tenant held land on various terms.

In the area of the former Travancore State, there were four free-hold estates (*Edavagais*) which were more or less like the zamindaris in other parts of India. The total land under such type of tenure was 1,04,925 acres. The class of landholders called '*kuthagapattom* lessees' were given lands by Government on lease for limited periods, sometimes without limit of time. These tenants had no fixity of tenure and could be evicted any time. They were also not entitled to compensation for improvements made by them in the event of eviction. There is again a class of landholders called the *jenmies*. The lands are leased out by them on the *kanom* tenure. The latter have been granted full ownership right, subject only to the payment of *jenmies'* dues. Other types of tenants under the *jenmies* have no right of ownership and are liable to eviction at will.

In the area of Cochin, all persons who hold land directly under Government have absolute ownership. The lands are classified under two broad heads, viz., *pandaravaka* and *puravaka*. The State has the proprietary right over the former, and private individuals or public institutions hold proprietary rights or *jenmom* over the latter. Both these types of tenure are of a ryotwari nature. Even before the integration of Travancore and Cochin, the economic position of the agricultural class was investigated in great detail by a special committee appointed in 1949. On the basis of the recommendations of this Committee, legislation was introduced but had to be dropped on the integration of the States. After integration, the Land Policy Committee, 1950, recommended the fixity of ceilings for future acquisitions between 50 to 75 acres, suggested the amendment of *kuthagapattom* rules, as also restrictions on alienation of agricultural lands and generally recommended the grant of fixity of tenure to all tenants on payment of fair rents. Landlords were allowed to resume land for *bona fide* self-cultivation. The Travancore Prevention of Eviction Act, 1949, to protect the *kudikidappukars* from arbitrary evictions, the Holdings (Stay of Execution Proceedings) Act VIII of 1950, passed to stay proceedings in execution of civil decrees for eviction of holders of land by way of lease-hold, and the Verumpattomdari Act granting fixity of

tenure to *verumpattomdari* tenants are the chief reforms under tenancy. These enactments do not, however, cover all the aspects of the problem in the former two States in regard to the types of tenancies prevalent in the areas.

Madhya Pradesh

The Madhya Pradesh Abolition of Proprietary Rights (Estates, Mahals, Alienated Lands) Act, 1950, vested in the State all proprietary rights in estates, mahals, alienated villages and alienated lands. By 1951, proprietary rights in about 43,000 villages passed on to the State Government. The Act was designed to eliminate the various categories of intermediaries, *viz.*, *zamindars*, *malguzars* and their under-tenures. The scheme of compensation was on the pattern of the U.P. Act, with local variations and was self-sufficient. The compensation was to be paid at a flat rate of 10 times the net profits. The small proprietors were to be granted rehabilitation grants in addition. The funds were to be collected by the recovery of a premium on a voluntary basis at a prescribed rate of three times the annual rent from absolute occupancy tenants and four times the annual rent from occupancy tenants. For calculating compensation a minimum limit of net profits was fixed at 5 per cent of the gross assets. The home farm land, *Sir* and *Khudkasht*, were left with the outgoing proprietors in *malik-makbuza* rights (plot-proprietorship), subject to the payment of land revenue which was on par with the pitch of rents payable by the tenants of the locality. Interim compensation was provided if the compensation payable was not determined within twelve months of the date of acquisition. The compensation in cash was to be paid in instalments not exceeding eight. The amount of compensation was estimated at Rs. 480 lakhs and of rehabilitation grants Rs. 9 lakhs.

The pattern of land tenure in the State was on the ryotwari model. The tenants who volunteered to contribute the amount of the prescribed premium would be conferred plot-proprietorship. The revenue administration would be in charge of a *patel* or vested in such *gram panchayats*, which were considered capable of shouldering the responsibility. The communal land and the village forest land would be made over to the *gram panchayats* for such management.

. In the Berar region, where the ryotwari tenure prevailed, with the right of transfer, the resulting evils were absentee landlordism, habitual sub-letting of land and rack-renting. The Berar Regulation of Agricultural Leases Act, 1951, sought to correct these defects in the system. Under the Act, the lessees became 'protected lessees,' and the minimum period of lease was five years, with the option given to the former to renew the lease for periods of five years. The problem for the future was to consolidate into one single law the various regulations which have been passed to reform the system of land tenures in the State.

Madhya Bharat

The united States of Gwalior, Indore and Malwa (Madhya Bharat) Zamindari Abolition Act, 1950, on the recommendations of the Zamindari Abolition Committee, 1949, provided for the abolition of the rights of proprietors in villages or *mahals* settled on Zamindari system in these areas. Every proprietor of the acquired land would be a *pucca* tenant of the *khudkasht* land in his possession. After the elimination of intermediaries, the new set-up of revenue administration was on the ryotwari system. The total cost of abolition was estimated at Rs. 10 crores ; out of which Rs. 3 to 5 crores were expected to be realised by the purchase of *pucca* tenancy rights by non-occupancy tenants and sub-tenants. The rest of the amount would be paid from the revenue reserves. A Zamindari Abolition Fund was created and for the abolition of zamindaris alone the compensation amount worked out to Rs. 7.5 crores including interest. Besides the abolition of the Zamindari system, the Government also abolished the *jagirdari* system in the State under the Abolition of Jagirs Act, 1951, which was established by the Maratha rulers in the 18th century. Under the scheme of abolition, the *jagirdar* was entitled to receive compensation in respect of *jagir* lands resumed. The compensation would be 7 times the net income of the *jagirs* in the agricultural year immediately preceding the agricultural year or the date of resumption. In respect of the *khudkasht* lands of the *jagirdar* the same rights as that of an occupant in ryotwari land would prevail. The rights of a *pucca* tenant were also conferred on every tenant of a *jagirdar* as from the date of resumption and a sub-tenant or a tenant of a sub-tenant would apply to the prescribed authority after depositing the amount. The estimated amount of compensation

on the acquisition of *jagirs* was about Rs. 4 crores. The *jagirdars* were not entitled for any rehabilitation grant.

The area in the former State of Vindhya Pradesh had many intermediary tenures resulting from the grants for religious and charitable purposes or acts of bravery. The intermediary tenures are variations of the major type of tenure, *viz.*, *pawai*, which includes the *illaka* type of tenure also. *Illakadars* are those tenure holders whose gross income (*jama-nikasi*) amounts to Rs. 10,000 or more. The *pawais* are generally heritable in nature unless specified to the contrary in the document governing their grants. Under these tenures, the peasantry were subject to the same kind of exploitation as was found in the other States. No reform measure was actually in operation in this area in the period under review.

Madras

The worst type of peasant exploitation in Madras prevailed in the zamindari areas which covered one-fifth of the area of the State. When the Madras Estates (Abolition and Conversion into Ryotwari) Act (1948) was passed, zamindari and *inam* tenurial systems together covered 26 per cent of the area of the State. At the time of the introduction of the Permanent Settlement in Madras, certain complementary regulations were also passed to ensure that the rents which the ryots had to pay to the zamindars were not increased beyond the customary rates. But in spite of this regulation, rack-renting by the zamindars reached alarming proportions. The Madras Estates Act of 1908, which accorded occupancy right to every zamindari-ryot subject to the payment of lawful rent, did nothing to reduce the enhanced rents. The *inam* villages were also placed on the same footing as the zamindari estates and the same Act applied to them. The legal situation remained the same till 1931, when the Estates Land Act Committee, known as the Prakasam Committee, was appointed. The Committee submitted its report in 1938. Later, the main recommendations of the Committee were embodied in the Madras Estates Abolition Legislation of 1948 which provided for the transfer to the State of all permanently settled estates, free of all encumbrances in the same manner as lands in ryotwari areas. Thus, all communal lands, forests, mines, minerals, etc., of the estates vested in the State. The ryot in respect of his holding and the landholder in respect of his private

land were permitted to have the rights of the holder under ryotwari settlement. The dispossessed intermediaries were provided compensation on a graded scale as fixed multiples of the basic annual sum. Out of the total number of 7,423 *inam* villages in the State, 4,157 villages were declared to be *inam* estates and were taken over by the State. Pending the final ryotwari settlement in the estates that were taken over, provision was made for the payment of interim compensation, equal to the basic annual sum in respect of an estate. The payment of compensation was to be in cash or also in lands. A sinking fund out of the net annual revenues from the estates taken over was constituted for the purpose. The total compensation to be paid was estimated at Rs. 15½ crores and the additional land revenue expected to be realised was estimated roughly at Rs. 30 lakhs.

Mysore

In the State of Mysore, an *Inam* constituted a grant by Government for the personal benefit of an individual or individuals, or for religious, charitable or other purposes, or for services rendered to the State or to a village community. The lands under such tenure were either held free of assessment or subject only to a quit-rent (*jodi*). The conditions in the *Inam* villages have been the subject of serious consideration of Government since the second decade of this century, when an Inam Commission was appointed (1918). In 1932, another Committee was appointed which recommended additional measures for giving security to the tenants. However, the demand for the abolition of *Inams*, *Jahagirs*, etc., persisted because of the evils of the intermediary system, which prevailed in the *Inam* villages also. The elimination of intermediaries was, therefore, considered necessary by the Committee (1932), which recommended the abolition of the tenure by payment of compensation instead of assuming management by Government. The Committee also considered that the rational basis of fixing compensation was the net income of the *Inamdar* as the superior holder.

After the vesting of *Inams* in the Government, the rights of cultivators were defined as below :

A *Kadim* tenant was to be treated as a registered occupant of all lands held by him under Government. A permanent tenant was

to be treated as the registered occupant of the lands over which his tenancy extended after recovering 10 times the assessment* on his holding. The *Inamdar* was to be treated as registered occupant if he personally attended to the cultivation of the lands for a continuous period of 6 years prior to 1st July, 1948. Similarly, a tenant-at-will who cultivated any land for the same period would be treated as a registered occupant subject to non-alienation for a period of six years if he paid an upset price equal to 10 times the average annual net income obtained by the *Inamdar* in the said period of 6 years.

Orissa

In Orissa, a large area was cultivated by share-croppers and landless labourers. Therefore, the reform of the tenancy system was also an urgent necessity. The problem had been recognised by the Government even earlier and the following measures were passed with a view to regulating the tenancy system :

- (1) The Orissa Tenancy Amendment Act, 1946, which conferred occupancy right on non-occupancy ryots, under-ryots, service-tenure holders, etc., in respect of their homestead lands.
- (2) The Amendment Act, 1947, under which sub-division of holdings by metes and bounds became binding on the landlord.
- (3) The Madras Estates Land (Orissa Second Amendment) Act, 1946, which conferred occupancy rights on tenants in whole *inam* villages.
- (4) The Amendment Act, 1947, of the above which empowered Government to fix fair and equitable rent for the proprietary estates of South Orissa where rents were abnormally high.
- (5) The Orissa Tenancy (Second Amendment) Act, 1947, which conferred rights on *Chandnadars* in respect of their homestead land.

- (6) The Orissa Communal, Forest and Private Lands (Prohibition of Alienation) Act of 1948, which prevented landlords from alienating certain classes of lands on the eve of the abolition of the zamindaris without the previous permission of the Collector. This especially benefited the cultivating tenants on the private lands of the zamindars.
- (7) The Orissa Tenants Protection Act, 1948, which gave temporary protection to under-tenants against eviction and fixed the rate of produce rent payable by them.
- (8) The Orissa Tenancy (Amendment) Act, 1948, which made provision for reservation of adequate communal lands in a village.
- (9) The Orissa Tenants Protection (Amendment) Act, 1947, which made provision for division of hay and subsidiary crops between under-tenants and landlords.
- (10) The Orissa Merged Estates (Laws) Act, 1950, which conferred rights of free transfer, full rights over trees and certain other tenancy rights on occupancy tenants in the merged estates.
- (11) The Orissa Tenancy (Amendment) Act, 1950, which gave option to service *jagir* holders to cease rendering personal service and to apply to the Collector for fixation of fair and equitable rent in respect of their lands. The Act referred to, laid down the principle of fixation of fair and equitable rent in the districts of South Orissa, made provision for settlement of fair and equitable rent in respect of the service *jagir* lands and the *khamar* lands of Rulers and members of their family and fixed the rate of produce rent payable by the under-tenants to the landlords.

Punjab

Punjab was a land of peasant proprietors. The growing pressure of population on land and the monopoly value which land acquired consequent on scarcity, resulted in the expropriation of

the peasant proprietor by the unscrupulous moneylender.² The evils of sub-letting and rack-renting increased. The Punjab Land Alienation Act of 1901 and the subsequent Peasant Protection and Debt Conciliation Acts aimed at remedying these defects, but really they tinkered with the problem and gave no substantial relief to the actual cultivator.

The tenants in the Punjab were of two categories: the occupancy tenants and the tenants-at-will. The former had heritable rights. In addition to the payment of land revenue of the proprietors, they had also to pay the *malikana* or the amount payable in recognition of the superior rights of the proprietor. This *malikana* varied from 2 annas in the rupee to 8 annas according to the privileges enjoyed by the occupancy right-holder. The number of occupancy tenants was comparatively small and they cultivated only 7 per cent of the total area. The great majority of the tenants were tenants-at-will who paid half the crop and had no rights whatsoever.³ The Bengal Famine Commission estimated that nearly 50 per cent of the total cultivated area of the Punjab was cultivated by the tenants-at-will. This indicated the extent to which the practice of absenteeism was prevalent in the State. The tenants corresponded for the most part to the *bargadars*. The rate of cash rents obtaining in the State in 1940 was between Rs. 10 and 12 an acre higher than the rates of rents prevailing generally in the zamindari areas. It was calculated that the landholders in Punjab took as much as 80 per cent of the net produce of the peasants under the *batai* system. In the Harijana districts of the State, the situation was worse with the *jagirdar* realising not only his unearned income of half the produce as his legal share, but receiving numerous service-taxes for which a compulsory levy of grain was taken. Actually the peasant was left with only a fourth of his produce.

The Partition with its attendant consequences only accentuated the precarious situation of the rural masses in the State. All the evils in the land system of pre-partitioned area continued. According to the figures provided in 1948, 65.2 per cent owned less

² Sir Edward Maclagan in his Foreword to *The Punjab Peasant in Prosperity and Debt* (1925), by Sir M. L. Darling.

³ Report of the Bengal Land Revenue Commission, Vol. I, p. 92.

than 5 acres of land, 83·3 per cent less than 10 acres and 90·5 per cent less than 15 acres. Thus 20 lakhs of owners, *i.e.*, 80 per cent of the total had holdings of 10 acres or less. Out of these, 14·2 lakhs had holdings of 5 acres and less. As against this, 11,685 owners, *i.e.*, about 0·45 per cent had holdings of 100 acres and above.

The task of rehabilitation of the displaced population after Partition prevented the State from giving its immediate attention to the problem of land reforms. However, the introduction of reform measures in other States had their repercussion in the demand of the tenants in the State for security of tenure and rights in land. In anticipation of reforms in the State, there was widespread ejectment of tenants by the landlords who resumed land for personal cultivation.

The Punjab Tenants (Security of Tenure) Act, 1950, promulgated first as an Ordinance granted limited relief to the tenants. Subsequently, a Committee was appointed to examine the land problems of the State. This Committee reported that *ala maliks*, *talukdars*, etc., had no direct connection with the land and recommended that their interests in the lands should be extinguished. The Punjab Occupancy (Vesting of Proprietary Rights) Act, 1951, and the Punjab Abolition of Ala Malikiyat and Talukdari Rights Act (1952), were enforced as President's Acts and subsequently re-enacted. By virtue of the provisions of these two Acts, all titles, rights, interests, etc., of such landlords and *ala maliks* have since been extinguished and vested in the occupancy tenant and the *adna maliks* respectively. The landlords and *ala maliks* have been allowed compensation for their rights in those lands. The Punjab Occupancy Tenants (Vesting of Proprietary Rights) Act, 1952, gives the occupancy tenants a share in *shamilats* with respect to the land concerned. In regard to the protection of the interests of tenants-at-will, an Ordinance was promulgated in 1950, subsequently replaced by an Act, which provided that all owners of lands in excess of 100 standard acres or 200 ordinary acres could reserve land up to that limit for self-cultivation, and the tenants-at-will in the remaining land owned by such owners would have fixity of tenures for a period of 4 years at least, and they would not be liable to ejectment during that period except for reasons specified.

In the absence of any agreement regarding rent, the customary rent prevailing in the *tehsil* in which the land was situated would be payable. The experience of the working of this Act showed that the relief granted to the tenants was meagre. Therefore, the Act was further amended to lower the permissible limit which an owner can reserve for self-cultivation to 50 standard acres or 100 ordinary acres, and also raised the tenure of tenants-at-will over the land beyond the permissive limit from 4 to 5 years. The Act also provided for the right of pre-emption and the purchase of the land by the tenants, after he had been in continuous possession of the land for 4 and 12 years respectively.

In the area comprised in the group of former Patiala and East Punjab States Union there were a large number of *biswedari* sardars. The condition of the tillers of land living in such *biswedari* villages has been compared to that of slaves. There existed tenants in such villages who never got any benefit from occupation, even though they were occupants of land for several decades and paying regular *batai*. A large share of the produce was taken by the landlord and the poor tenant had to subsist on the miserable share left to him. When the union of the States was effected in 1948, the Land Alienation Act was extended to this area. Subsequently, the Pepsu Tenancy and Agricultural Lands Act offered great security of tenure to the tenants-at-will cultivating over a million acres in the State.

Rajasthan

The *jagirdari* system extended to nearly 82 per cent of the total area of the princely State of Jodhpur and 65 per cent of that of Jaipur. The question of *jagirs* presented many difficulties and complications in the State. Of the 83 per cent of the area under *jagirs*, only one-fourth was settled; no land records existed except in respect of settled *jagirs*. The data on which the income of *jagirs* could be assessed were not available. The fragmentation of *jagirs* in certain areas raised the problem of thousands of small *jagirdars* who lived mainly on the rent obtained from the tenant in kind. The *jagirs* and tenants were also divided on a community basis as Rajputs and Jats respectively which involved unusual problems of maintaining law and order. The abolition of *jagirdari* system was recommended by the Venkatachari Committee which enquired

into the land tenure systems. The recommendations could not be immediately given effect to in the form of a legislation. The Rajasthan Jagir Abolition Act, 1952, has attempted to re-adjust the tenure system in the State. Under the Act, the Government would resume only *jagirs* which have an annual income of about Rs. 5,000 or less, *jagirs* the income of which is not utilised for religious purposes and only such *jagirs* which are under the management of the Government or the Court of Wards, or situated in settled villages. The *jagirdar* would receive compensation at 10 times the net income. The *jagirdar* would be allotted *khudkasht* areas subject to a maximum of 500 acres of un-irrigated land. All *jagir* lands would be subject to land revenue. Following the Nehru Award on compensation, the Act brought within its purview *jagir* lands, even upto an income of Rs. 5,000. Besides, the Rajasthan (Protection of Tenants) Ordinance, 1949, sought to check the growing tendency of landholders to eject or dispossess tenants from their holdings.

The Rajasthan Agricultural Rents Control Act, 1952, aimed to control the rack-renting activities indulged deliberately by the landholders. The Rajasthan Rent Produce Regulating Amendment Act, 1952, fixed a maximum limit of one-sixth of the gross produce as the share of landlord for each harvest, and thus sought to minimise disputes between landlords and tenants in respect of rents payable in kind in the unsettled areas.

In the area of former Ajmer State, three kinds of tenures, viz., *istimrari*, *khalsa* and *jagir* prevailed. The rights of tenants of all the three types were regulated under the Ajmer Land and Revenue Regulation, 1877, under which all of them were treated as tenants-at-will without any security. The Ajmer Tenancy and Land Records Act was enacted and brought into force in the State from May, 1950 to remedy the defects. Under the Act, the tenants were classified and the rates of rents reduced and fixed. The rent payable by a hereditary or a non-occupancy tenant other than a sub-tenant was fixed at one-fifth of the produce of his holdings; by an occupancy tenant at one-sixth of the produce; and by an ex-proprietary tenant at one-eighth of the produce.

Uttar Pradesh

In Uttar Pradesh, the necessity for regulating the relations of landlords and tenants were recognised even before the introduction of the Permanent Settlement in 1795. But effective protection to tenants could be provided only in 1939, under the U.P. Tenancy Act, nearly 150 years later. While the rental demand increased by about 42 per cent between 1893-94 and 1944-45, the land revenue increased only by 15 per cent ; thus the margin of profit of the intermediaries went up by 69 per cent. This indicates that the peasants were made to render free services (*begar*) to the zamindar and the illegal exactions called *nazranas*. There existed an extraordinarily large number of such exactions. The position of the cultivators became worse under the excessive fragmentation of holdings which became a marked feature of agriculture in the State. The average size of economic holdings in U.P. was estimated at $6\frac{1}{4}$ acres. The vast majority of the holdings were uneconomic under this standard. Yet, the legislation was still in the anvil.

West Bengal

In Bengal, the main pattern of land organisation was almost left untouched until 1940. The Bengal Land Revenue Commission (1940) considered the Zamindari system detrimental to agricultural efficiency and favoured the State acquisition of the interests of all classes of rent-receivers. Practical steps for the reform of the land system were initiated only after the assumption of power by the popular Ministry. After the Partition, the West Bengal Bargadars Act, 1950, provided for the regulation of certain rights *inter se* of bargadars and owners of land and for the establishment of Bhag-Chas Conciliation Boards for settlement of disputes between them. It was applied to the whole of West Bengal and was to remain in force upto 31st March 1953. By an amendment Act of 1953, the period was extended to 31st March 1955. It specified the grounds on which a bargadar could be evicted and laid down the mode of division of produce between the bargadar and his landlord in case there was no agreement between them. The bargadar had a prior right to supply of plough-cattle, plough and other agricultural implements. He could be evicted only for certain reasons. However, the Amending Act made provision for payment of compensation in money to the bargadar.

Jammu and Kashmir

Till 1931, the lands in the entire Kashmir valley and in large areas of Jammu were under the personal ownership of the Maharaja. In 1931 the transfer of rights to the people was effected and as a result many petty cultivators got ownership over their lands. On the other hand, the *jagirdars* and *chakdars*, who also acquired rights over thousands of *kanals* of lands exploited the village population. Through various malpractices and the advantage of initial capital, they got thousands of acres of land transferred to their name from petty cultivators. Therefore, the basic principles of the Agricultural Plan in "*New Kashmir*" were laid as the abolition of landlordism, land to the tiller and co-operative association. On July 13, 1950 on the recommendations of the Land Reforms Committee the State effected far-reaching reforms. No individual, institution or religious organisation in the State could own more than 160 *kanals* (8 *kanals* = 1 acre) of cultivable land for their maintenance and all the remaining lands were transferred in proprietary ownership to those cultivators who were cultivating them. The Big Landed Estates Abolition Act which came into force in 1950 was enacted for the purpose of abolishing intermediaries' interests in land and the transfer of land to the tillers. The Act left the question of compensating the landlords to the Constituent Assembly. The expropriated landlords were to be paid an annuity of 75 per cent and 66 $\frac{2}{3}$ per cent of the revenue of land confiscated in the first and second years respectively and of 50 per cent of the revenue in the third and subsequent years. All land holdings of over 182 *kanals* in Kashmir State passed to persons actually tilling them. The estimated number of intermediaries affected by this Act was 8,989, who had about 90,000 dependants, the area involved was about 600,000 acres and the number of peasants benefited 1,25,000. The recommendations of the *Wazir* Committee on land reform included the fixation of a maximum unit for a proprietor in Kashmir *kandi* at 28 acres and in Jammu at 34 acres, as against the present uniform unit of 22 $\frac{3}{4}$ acres. The maximum that a tiller could acquire in ownership under the Big Landed Estates Abolition Act together with the land owned by him was not to exceed 65 *kanals*. No fragmentation of land below 65 *kanals* would be permitted.

APPENDIX II

LEGISLATION IN STATES—PLAN PERIOD (1950-51 TO 1955-56)

Andhra

In the region of the former Hyderabad State, the Act¹ was comprehensively amended to provide for a 'family holding' rather than the general 'economic holding' and defined the same as representing an extent of land which could be cultivated by a working family of five members as a plough unit, and yielding a net annual income of Rs. 800. The ceiling was fixed at 3 times the family holding. In the fixation of rent, the tenants were to get immediate relief. The prevailing rate was a maximum of one-third of the produce in wet lands and one-fourth in dry lands. In future, rents were to be fixed in terms of land revenue : 4 times the land revenue for dry land *chalk* soil, 5 times the land revenue for dry land black cotton soil and *bagat* (garden lands), 4 times the land revenue for well irrigated wet lands and 5 times for wet lands irrigated by other sources. Rents were to be paid generally in cash but it could be paid in grain of an equal value at prevailing market rate. The extent of land for resumption under personal cultivation from a protected tenant was reduced from 5 times the 'economic holding' to 3 times the family holding, provided each tenant of the landowner was left with a family holding; 2 times the family holding, provided each tenant was left with a 'basic holding', *i.e.*, one-third of the size of a family holding. A landlord could resume upto a family holding irrespective of whether any land was left to the tenant or not. The small and medium cultivators who held less than 3 times the family holding, if they sought supplementary occupations outside the area, could sublet the holding. Such lease should be for a minimum period of five years subject to the resumption for personal cultivation within that period on giving notice of one year. In order to prevent eviction of tenants, the definition of personal cultivation was revised to exclude payments in crop-share. Rules were also incorporated

1 The Hyderabad Tenancy and Agricultural Lands Act, 1950.

to prevent eviction on grounds of termination of tenancy or voluntary surrender or default in payment of rent.

The basis of payment by the tenant for the purchase of land was also shifted from 3 times the annual gross produce to 12 times the rent in case of wet lands and 15 times in case of dry lands. The payment could be effected in a maximum of 10 instalments during the period of 8 years with interest at 3 per cent per annum on the balance of the price due. Transactions reducing the extent of any holding below the basic size were prohibited. Standards of cultivation according to size were prescribed. If these standards were not satisfied, Government would take over the land in excess of 3 times the family holding on payment of adequate compensation. The land thus acquired would be entrusted to a village panchayat or a co-operative farming society or allotted to agricultural workers working on that land or landholders or tenants who cultivated personally less than a family holding. Such lands could also be purchased by the lessees at a price which would be 20 times the rent for dry lands and 16 times for other lands. For the implementation of these comprehensive and far-reaching reforms, the legislation provided for a regular land census and the establishment of a Land Commission, among other things, to fix the size of a basic and family holding for each local area, and decide on the extent of surplus land left to be taken over from the landholders.

As estimated, there were more than 600,000 of protected tenants in the former State area cultivating more than 670,000 acres of land which was nearly 25 per cent of the total cultivated area of the State. Under the legislation, the tenants could become owners of the land if they could pay the amount of compensation to the landholders as fixed. In order to aid these tenants, the Government set up a Land Mortgage Society to advance money to the protected tenants for the purpose of acquiring the right of ownership of land now in their possession.

The Andhra Inams (Abolition and Conversion into Ryotwari) Act, 1956, provided for the conversion of *inam* lands, excluding estates, into ryotwari lands. It also provided for the grant of permanent and heritable rights to tenants in occupation of

inam lands of institutions and for the reinstatement of tenants, evicted after January 7, 1948, the date of enforcement of the Madras Estates Land (Reduction of Rent) Act.

The Andhra Tenancy Act, 1956, prescribed the maximum rent payable by cultivating tenants in terms of proportion of gross produce. For crops, other than commercial crops, grown (a) on lands under Government irrigation sources, the rent payable was 50% of gross produce; (b) on lands irrigated from the same source, by baling 28½%; (c) on other lands, including unirrigable lands, 45% of gross produce. For commercial crops, the rent was 45% of the gross produce. The cultivating tenant was to bear all cultivation expenses. The landlord was liable for payment of all dues to Government and local authorities, including water rate, if any. The straw in its entirety belonged to the cultivating tenants. The minimum period of every lease was fixed at six years. A 'cultivating tenant' was defined as a person who cultivated by his own labour or by that of any other member of his family or by hired labour under his supervision and control, and any land belonging to another person under a tenancy agreement, express or implied, but not to include a mere intermediary.

Assam

The Assam Fixation of Ceiling on Land Holdings Act, 1956, provided for the fixation of ceilings on (a) existing holdings, (b) future acquisitions, (c) resumption of land by the landlords from tenants for personal cultivation and provided for acquisition by Government (against prescribed amounts of compensation) lands in excess of prescribed ceilings and the manner of their disposal. The limit of ceiling on existing holdings was 50 acres in the aggregate; all lands in excess of the ceilings were to be acquired by Government. Among the exceptions were mainly lands not exceeding 166⅔ acres utilised for large-scale farming with the help of power driven mechanical appliances. The rates of compensation were fixed as a multiple of annual land revenue of the land acquired. The multiples were in the case of owner for (i) fallow land 25; (ii) other land² 50; occupancy tenant for (i)

² Where such land is held by a tenant, the compensation will be apportioned between the owner and the tenant, the owner will get an equivalent of 15 or 20 times according as the land is held by an occupancy or non-occupancy tenant.

fallow land 10 ; (ii) other land 35 ; non-occupancy tenant for (i) fallow land 5 ; (ii) other land 30. For revenue-free lands the compensation was a multiple of land revenue for comparable lands. The compensation was to be paid in cash in one or more equal annual instalments within five years from the date of acquisition. The ceiling on future acquisitions was 50 acres. The lands in excess of the ceilings were to be settled first on the cultivating tenant in occupation of the land, provided his holding thereby did not exceed the ceiling limit and paid in instalments not exceeding five the fixed amount not larger than the amount of compensation for acquisition of that land, or on a cultivator rendered landless due to ejection by the landlord or due to flood, erosion or earthquake within two years prior to 12th November 1955, or on a co-operative farming society formed by landless actual cultivators or landless cultivators.

The right of resumption for personal cultivation extended to the entire area if the land held by the owner did not exceed $8\frac{1}{2}$ acres, and in other cases $8\frac{1}{2}$ acres or upto two-thirds of the aggregate area, whichever was higher, subject however, to the overall limit of $33\frac{1}{2}$ acres. The right was exercisable only by those landlords whose income by cultivation would be the principal source of income for maintenance. After the expiry of 5 years from the commencement of the Act, no tenant was to be ejected on the ground of personal cultivation, unless it was leased out due to disability of a landowner.

A Land Reforms Board would be set up under the Act to advise Government on formulation of policies and implementing the legislation, proposing schemes of co-operative settlement and of co-operative farming societies and evaluating the progress and effect of land reforms.

Bihar

The Bihar Government brought forward a comprehensive Land Reforms Act in 1950 which empowered the State to acquire the rights of proprietors and tenure-holders in their estates and tenures respectively, having a gross income above a certain amount,

by notification from time to time. The Act provided for compensation to the dispossessed intermediaries which varied inversely with the size of the net income and would be between 3 to 20 times of such income. The Act also laid down rates for the payment of compensation to the different categories of zamindars. The compensation was payable in cash or in bonds which would carry interest at $2\frac{1}{2}$ per cent per annum. After the date of vesting and before the date of payment of compensation, *ad interim* payments were provided bi-annually to the dispossessed proprietor or tenure-holder at 3 per cent per annum where the amount of compensation did not exceed Rs. 50,000 and at $2\frac{1}{2}$ per cent per annum on amounts exceeding Rs. 50,000. The Act provided for the setting up of suitable administrative machinery for the implementation of the Zamindari Abolition Scheme.

However, the implementation of the reform was delayed owing to the intransigence of the zamindars. The Act was challenged by the zamindars at the Patna High Court which declared it unconstitutional. To tide over the difficulty, the Constitution was accordingly amended in 1951 to provide for the validation of the Bihar Land Reforms Act, 1950. During the first phase of the zamindari abolition only the estates and tenures with gross annual income over Rs. 50,000 were taken over. There were 146 such estates which were notified and taken possession. The work of taking over the zamindari was expected to be completed by the end of 1955-56. The Amendment Act of 1953 empowered the Government to notify that all estates situated in a particular area would vest in the State without individually notifying each zamindar as provided in the original Act. All the zamindaris in eight districts of Bihar were vested in the State with effect from 26th January, 1956. There were about 20 lakhs of zamindaris of which 10 lakhs were affected by the abolition of intermediary interests which yielded an income of Rs. 10 crores out of a total of Rs. 16 crores per annum.

Bombay

The Act³ was radically amended in 1955 as a first step towards the realisation of the socialistic pattern of society in the sphere of land redistribution. The Government in explaining

³ The Bombay Tenancy and Agricultural Lands (Amendment) Act, 1948.

its policy in the sphere of land distribution observed : "while the Act of 1948 contains in it the elements of the policy of the abolition of intermediaries, the vesting of occupancy of land in the tiller of the soil, redistribution by the imposition of limits on individual holdings and facilitating the holders to acquire as far as possible economical holdings, it does not go far enough nor does it provide the necessary power to translate the policy fully into practice." Under the amended Act, (1) while the existing holdings were not to be affected by the proposed ceiling area, no person in future whether as occupant or tenant or both would be able to hold land in excess of 48 acres of *jirayat* land or 24 acres of seasonally irrigated or paddy or rice land or 12 acres of perennially irrigated land; in the case of maximum holdings, a suitable formula for the conversion of the area into one unit was prescribed ; (2) a person who held land below the economic holding which was defined as 16 acres of *jirayat* land or 8 acres of seasonally irrigated or paddy or rice land or 4 acres of perennially irrigated land would be enabled to acquire enough land to make up the economic holding and also be protected from eviction by the landlord in the event of his requiring the land for personal cultivation or for non-agricultural uses. The rent payable by a tenant would not be less than twice nor would exceed 5 times the assessment, subject to the condition that the total liability of the tenant would not exceed the value of one-sixth of the produce of his land, taking into account the land revenue and the local fund cess payable by him. On and with effect from April, 1957, every tenant, whether permanent, protected or otherwise, would be deemed to have purchased from the landlord the land held by him as a tenant subject to the condition that he cultivated the land personally and his total holding did not exceed the ceiling limit. In the case of a permanent tenant, the purchase price would not be less than 30 times or exceed 100 times the assessment. In the case of other tenants, the limits would be 50 and 200 times the assessment. The purchase price could be paid either in a lump sum or in instalments not exceeding 10 within 12 years, with simple interest at the rate of $4\frac{1}{2}$ per cent. Leases of land granted for the benefit of any industrial or commercial undertaking other than a co-operative society and granted to any body or person other than the above for the cultivation of sugarcane or fruits would be exempt from the provisions of certain sections ; but the State would have the power to regulate leases of such land. The Act has been further

amended in 1957 to remove doubts on the interpretation of certain provisions of the previous Act in force from August 1, 1956.

In the merged territories of Baroda, occupancy rights have been conferred on the tenants of *jiwai* lands of *Ankadedars* on payment of some occupancy price to the *jiwaidar*.⁴ Occupancy rights were previously conferred on the tenants of *non-gharkhed* lands only of the *Ankadedars*.⁵ The *shilotri* rights of the *shilotridars* in Kolaba are abolished on payment of compensation equivalent to three times the average value of the "shilotri maund" in the previous three years.⁶ The resumed *watan* lands which were to be granted to the holders of *watans* on payment of the prescribed occupancy price are vested in Government.⁷

Madhya Pradesh

In the area of the former Vindhya Pradesh State, the right, title and interest of all the various types of intermediaries vested in the State.⁸ The *jagirdar* can be allotted *Sir* or *khudkasht* land to the extent of 250 acres if he has no such land or if he has less than such extent of land. The *jagirs* would receive compensation from the date of resumption with interest at 3½ per cent per annum. The compensation would be paid in annual instalments not exceeding 10. Provision was also made for payment of interim compensation. *Jagirs* were divided into three classes on the basis of net income not exceeding Rs. 1,000, exceeding Rs. 1,000 but not exceeding Rs. 5,000 and exceeding Rs. 5,000. The compensation was 15, 12 and 10 times the net income of these categories respectively.

The Rewa Land Revenue and Tenancy Code was made applicable to the area. The Code conferred protection on the tenants and the provisions were progressive and liberal. Three types of tenants were recognised: (1) *Pachpan-Paintalis* tenants,

4 The Bombay Merged Territories (Ankadia Tenure Abolition) (Amendment) Act, 1955.

5 The Bombay Merged Territories (Ankadia Tenure Abolition) (Amendment) Act, 1953.

6 The Bombay Shilotri Rights (Kolaba) Abolition Act, 1955.

7 The Bombay Parganas and Kulkarni Watans (Abolition) (Amendment) Act, 1955.

8 The Vindhya Pradesh Abolition of Jagirs and Land Reforms Act, 1952.

(2) *Pattedar* tenants, and (3) *Gainhaqdar* tenants. The interests of the first type of tenants were heritable and transferable. They enjoyed a concession of 45 per cent in rent. The interests of the other two types of tenants were also heritable unless there was anything to the contrary in the Act. Any tenant could become a tenant under the first category if he constructed a *bandh* with the permission of an authorised revenue officer. In order to stop the evil practices of the ejection of these tenants, it was provided that no civil or revenue court could entertain any proceeding for the ejectment of any tenant or sub-tenant for any *Sir* land.⁹ Such proceedings could be entertained only on the grant of a certificate to a *pawaidar* by the prescribed authority.

In Madhya Bharat area the hardship caused to small *jagirdars* as a result of certain provisions in the Abolition of Jagirs Act was removed.¹⁰ The principal Act laid down that compensation should be paid to *jagirdars* in ten equal annual instalments. It was provided that compensation amount may be paid either in a lump sum or in less than ten instalments. Compensation was also sought to be paid to certain categories of tenants who were not eligible for it so far.

In the former C. P. area, the existing tenancy law was amended to permit transfers of land by way of gifts, bequests and transfers by occupancy tenants to the *Gram Panchayat* and public institutions.¹¹

Madras

The disturbing conditions in the relationship of the landlords and tenants in the Tanjore District of Madras necessitated the promulgation of the Tanjore Tenants and Pannaiyals (Protection) Ordinance (1952). The *pannaiyals* were the permanent farm servants of the landlord or the *mirasdar* in the district and the inhuman treatment meted out to them is graphically reported by the Congress Agrarian Reforms Committee. Under this Ordinance, every tenant became entitled to two-fifths of the gross produce after

⁹ The Vindhya Pradesh 'Sir' Lands (Stay of Ejectment Proceedings) Act, 1952.

¹⁰ The Madhya Bharat Abolition of Jagirs (Second Amendment) Act, 1956.

¹¹ The Central Provinces Tenancy Amendment Act, 1956.

meeting all harvesting charges. If the tenancy provided for rent, the tenant had to give the landowner, three-fifths of the normal gross produce in the land, after meeting harvesting charges. If the rent was to be paid in cash, the landlord had to pay the value of three-fifths of the produce of the land, calculated at the price prevailing in the year immediately preceding the appropriate five-year term. If the rent was to be paid in grain, the payment was immediate on the threshing floor after each harvest. No tenant could be evicted except on application made to an authorised authority. Every cultivating tenant who was in possession of any land on December, 1951, was entitled to be in possession thereof as such tenant, until the expiry of a period of five years from the commencement of the agricultural year 1952-53. If such tenant was not in possession of the land at the commencement of this measure, he was entitled to apply to be restored to such possession, any other person who took possession as tenant being evicted from the land.

Thus the Ordinance restored all those tenants who were evicted in Tanjore on account of riots and apprehensions. The cultivating tenants were protected and the share of the cultivator increased. The farmer was given security of holding for a certain number of years. There was statutory recognition of the customary practice in regard to expenses incurred for seeds, manures and cultivation. The wages payable to *pannaiyals* or farm labourers and the members of their family were laid down. All the differences in rates of payment were levelled down and brought to a uniform and higher share to the tenants and *varamdars*. The Ordinance was approved as an Act and was extended to a portion of the South Arcot district also.

In the ryotwari areas, the registered holder or the *pattadar* leased out land for cultivation on a crop-sharing basis. Share-cropping became a marked feature of the system. The percentage share of the landlord varied from 55·6 in Vizagapatam to 92·4 in Coimbatore. With the major share of the produce going to the landlord and with an increase in the indebtedness of the tenants, the ryotwari system required urgent reform in order to arrest the deteriorating effects on cultivation. The Report of the Land Revenue Reforms Committee, 1951, observed that the landlord and tenant system may be allowed to continue, subject to regula-

tion of rents, security of tenure, compensation for improvements, etc. The need to confer occupancy right on tenants in ryotwari areas was not felt. A minimum period of five years for the lease was recommended. In the case of virgin land to be reclaimed, or newly reclaimed, the first lease was to be for a minimum period of ten years. Conditions were laid down for the tenant and the landlord for termination of the lease. On the question of redistribution of land and the fixing of a minimum size of holding, the Report recommended : "There is no need to fix any maximum limit *per se*, in the case of existing holdings, and expropriate the extents in excess of such maximum. In future no person should be allowed to acquire agricultural lands if he already has a holding carrying an assessment Rs. 250, or so as to constitute a holding carrying more than Rs. 250 as an assessment. In the case of joint families, separate allowance should be made for such branch of the joint family subject, however, to an overall limit of holding, the assessment on which does not exceed Rs. 1,000."

Pending final and comprehensive legislation, the South Kanara Cultivating Tenants Protection Act was passed in 1954, which prevented the eviction of cultivating tenants. The Malabar Tenancy Act, 1929, was modified in 1951 to reduce the fair rents payable to landlords by tenants of pepper gardens, cocoanut gardens and wet lands. Tenants in occupation for 6 years and more were not liable to be evicted on the ground of personal cultivation.

The Madras Cultivating Tenants (Payment of Fair Rent) Act, 1956, fixed the fair rent as a proportion of the normal farm produce or its value in money at (i) 40% in the case of wet land, (ii) 35% in the case of wet land where irrigation was supplemented by lifting water, (iii) 33½% in the case of any other class of land. In every harvest the landlord was entitled to one-fifth of the straw or stalk of all the crops. Where under agreement the rent was lower than the fair rent prescribed, the lower rent was to hold good for the contract period. All the cultivation expenses were borne by the cultivating tenant while the landowner was responsible for payment of all dues to Government and local authorities, subject to his right to recover from the cultivating tenant the public charges which were expressly made payable by the cultivating tenant. All capital expenditure necessary to maintain

the land and wells in a state of proper repair was to be borne by the landlord. The rent may be paid in kind or cash or partly in kind and partly in cash as per the contract and in the absence of it at the option of the tenant. The proposals were to amend the Madras Cultivating Tenants Protection Act, 1955, with a view to extending its tenure for a further period of two years and enforcing it in some other areas in the State not covered by the original Act. It was also proposed to modify the term 'cultivating tenant' so as to avoid any intermediary being treated as a cultivating tenant.

The Madras Estates (Supplementary) Act, 1956, provided for the setting up of machinery for the expeditious determination of the question whether any particular area was or was not an estate as defined in the Madras Estates Land Act, 1908.

Mysore

The Mysore Tenancy Act, 1952, was in force in ten taluks of the former State. The object was to secure fixity of tenure and fair rent to the tenant and promote cordial relations between the landlord and the tenant. The minimum period of tenancy was 5 years. The maximum rent payable was one-half of the crops raised on land let on lease, or its value, or the reasonable rent to be determined by the *Amildar*. Government may fix a lower maximum in any particular area. The tenancy could be terminated only on certain conditions laid down. The tenants in possession of land for 12 years were deemed to be 'protected tenants' and therefore could not be evicted except under certain prescribed conditions.

The Mysore (Personal and Miscellaneous) Inams Abolition (Amendment) Act, 1956, provided for the conferment of permanent and heritable rights of tenancy on tenants-at-will of *inamdars*, which the Act of 1954 conferred on *inamdars* with occupancy rights not only in respect of the lands under their personal cultivation but also in lands in the possession of tenants-at-will.

By further legislation in 1957, maintenance of *status quo* in tenancy conditions was ensured in areas which were parts of old Bombay State; interests of tenants were safeguarded in the Coorg

District (former State). The introduction of uniform tenancy law applicable to all over the State is under consideration.

Orissa

The Orissa Estates Abolition Act, 1952, followed the recommendations of the Land Revenue and Land Tenure Committee. The Committee recommended for the establishment of the Anchal Shasan scheme which envisaged the taking over by the State of all interests in land and handing it over to the local authorities for cultivation by agriculturists without any intermediaries. The Act did not approve of the *Malikana* scheme for compensating the dispossessed intermediaries. Instead, the compensation was provided in multiples of net income. It may be paid in cash or in bonds of guaranteed face value at maturity within the specified period. The total compensation was estimated at Rs. 629 lakhs; the interest on this was estimated to amount at Rs. 272 lakhs.

In September, 1953, the Government of Orissa decided to create a Zamindari Abolition Fund. By that time, nearly 1,645 estates had been taken over. This yielded a gross income of Rs. 65.2 lakhs against the previous payment of land revenue by zamindars of Rs. 15.2 lakhs. The extra income of Rs. 50 lakhs thus derived from the management of these estates was transferred to the Zamindari Abolition Fund to meet all expenditures connected with the administration of the Zamindaris taken over and payment of compensation to the excluded zamindars. The non-co-operative and obstructive attitude of the zamindars and the absence of a suitable administrative machinery for this purpose possibly delayed the acquisition of all the estates.

The Orissa Share-Croppers Protection Act, 1953, which came into force at the cessation of the Orissa Tenants' Protection Act, 1948, sought to afford protection to the share-croppers from evictions and to provide for conferment of tenancy rights. Under the Act, a share-cropper was entitled to two-thirds of the produce and the balance of the one-third was given to the owner. A share-cropper who had been evicted after the 15th August 1947, was given a right to apply to the Bhagchas Commission of the area for the restoration of tenancy, if the owner did not cultivate per-

sonally such land within one year from the termination of tenancy or allowed another crop-sharer to cultivate within a period of 5 years from that date. The Commission was to prepare a record of all the share-croppers of that area and to decide all disputes between share-croppers and owners. The Act also provided for the constitution of District Appellate Boards.

Punjab

The Punjab (Security of Land Tenures) Act, 1953, repealed the Punjab Tenants (Security of Tenure) Act, 1950 and its amendment of 1951. Under this measure (1) the maximum permissible area which a landholder could reserve for self-cultivation was 30 standard acres or 60 ordinary acres whichever was less, with exceptions in the case of displaced persons ; (2) after April 1954, ejectment would be subject to the non-fulfilment of certain conditions. The maximum rent payable by a tenant should *not* exceed one-third of the crop of such land or the value thereof, as determined in the prescribed manner, and where the customary rent was less than one-third, the maximum rent should be the customary rent ; every landowner should give a valid receipt, the failure of which would make him liable for conviction. In order to prevent any consequential ejectment of tenants arising from the above Act, the Punjab Prevention of Ejectment (Temporary Powers) Bill, 1952, was promulgated.

Among other land reforms introduced in the State, the abolition of the *Zaildari* institution with effect from October, 1952, was significant. In 1953, the system of *Jagirdari* in the State which existed in certain areas was abolished by legislation. A legislation was also under consideration for giving equal rights to the non-proprietary classes in the enjoyment of essential rights in *shamilat* lands. Two other measures relating to the abolition of *biswedari* in occupancy areas and termination of superior ownership rights of princes and landlords were also enacted. The first sought to abolish superior ownership over 36,000 acres out of about 1,00,000 acres. The compensation was fixed at 5 times the land revenue and the total compensation was estimated at Rs. 21,000. The second enactment, the Pepsu Occupancy Tenants (Vesting of Proprietary Rights) Act, 1953, bestowed proprietary rights on the occupancy tenants automatically without waiting for the full

compensation paid by them. The responsibility of realising the compensation and paying it to the landlord was taken over by the State. The tenants had no option to refuse. The compensation would be recoverable as arrears of land revenue. The compensation was fixed at 12 times the annual rent exclusive of land revenue and rates and cesses. The Pepsu Tenancy and Agricultural Lands Act, 1953, laid down the rights of tenants and defined the relations of owners and cultivators of a million acres of land. The landlords could eject tenants from a permissible land of 100 acres for personal cultivation. The tenants would acquire proprietary rights for the excess area by paying compensation at the rate of 100 times the land revenue or Rs. 400 per acre, whichever was less. The Act sought to raise many tenants-at-will to the status of full proprietors.

Rajasthan

The Rajasthan Land Reforms and Resumption of Jagirs (Third Amendment) Act, 1956, brought within the purview of the Act some more types of *jagirs* and clarified the position of *jagirdars* of different income-groups for payment of rehabilitation grant.

The Ajmer Abolition of Intermediaries and Land Reforms (Amendment) Act, 1956, removed certain difficulties experienced in the working of the Act of 1955, and redefined the terms 'estate' and 'standard acre', and made provision for an annuity to be paid to religious and charitable institutions in lieu of compensation. It also provided for the automatic renewal of certain leases and permitted a *kashtkar* to join a co-operative farm. The Rajasthan Jagir Decisions and Proceedings (Validation) (Amendment) Act, 1956, sought to enlarge the definition of "*jagirdar*" so as to bring within its scope a grantee of a *jagirdar* also. The Ajmer Shamlat Deh (Regulation) Act, 1956, sought to vest all rights and interests in *shamlat* lands in the Panchayats.

Uttar Pradesh

The Zamindari Abolition and Land Reforms Act which was finally validated in 1952, after being successively contested in courts, vested the rights of all zamindars in U.P. in the State. It finally liberated the peasants from the exploitation of landlords.

The total area of land held by zamindars was 41·3 million acres. The Act provided for the acquisition of 39 million acres by the State at the cost of Rs. 160·13 crores to be paid by way of compensation. Of the entire cultivated land, 82 per cent was in the possession of tenants, while the remaining 18 per cent was with the cultivating proprietors. Under the Act, all the interests of the intermediaries vested in the Government free from all encumbrances. The zamindars were allowed to be in possession of land in their own cultivation. The payment of compensation was fixed at a uniform rate of 8 times the net assets.

The Act provided safeguards against any circumvention of the provisions through free gifts, sales, execution of new leases, etc., by the intermediaries. The number of intermediaries in the U.P. was around 2 million, more than 90 per cent being zamindars only in name, paying less than Rs. 25 as land revenue. For the rehabilitation of the smaller zamindars, constituting the overwhelming majority, the Act provided for payment of graded rehabilitation grants to intermediaries paying Rs. 5,000 and less as land revenue ; the rate of rehabilitation grants ranging from 2 to 20 times the net assets.

The new land tenure recognised only two main classes of tenure-holders, (1) the *Bhumidars* and *Sirdars* and (2) minor classes, viz., *Asamis* and *Adivasis*. All the existing zamindars were given *bhumidari* rights in respect of lands under their personal cultivation. The *Sirdars* would have the right to become *Bhumidars* by paying 10 times their rent. The right of a *Bhumidar* was permanent, heritable and transferable. He should not be liable for ejection and he could use the land for any purpose whatsoever. All the existing varieties of tenants, namely, the fixed rate tenants, tenants holding on special terms in *Avadh*, the ex-proprietary occupancy and hereditary tenants, the rent-free grantee, etc., were given *sirdari* rights. Under this tenure, while the tenants could have a permanent and heritable interest in their holdings, they were not allowed to use them for purposes other than agriculture, horticulture and animal husbandry. The *asami* rights were conferred upon tenants or sub-tenants of grovelands, tenants' mortgages and non-occupancy tenants of pasture lands or land covered by water or set apart for afforestation.

tion or in the bed of a river or used for casual or occasional cultivation and tracts of shifting or unstable cultivation. These rights were also conferred upon persons to whom leases were subsequently given by *Bhumidars* or *Sirdars* in accordance with this Act.

The large class of cultivators, the *Adivasis*, had no stable rights in land. They had been given right to hold lands for five years from the commencement of the Act. They would be able to acquire *bhumidari* rights after the expiry of 5 years on payment of 15 times the hereditary rate in case of tenants of *Sir* and 15 times the rent of the tenant-in-chief in case of sub-tenants. In such cases, the rights of the landholders would be extinguished ; they would be paid equitable compensation. The intention was to make the *Adivasi* system a transitional form of tenure, which would eventually disappear.

In order to prevent excessive sub-division of holdings, provisions were made to limit the bequest of land to successors. Sub-division of holdings would be permitted only if the parts, so sub-divided, were not less than an 'economic holding', which was computed at $6\frac{1}{4}$ acres. The *Bhumidar* would have the right to transfer the whole or part of the holding to any one, provided the person or persons to whom such transfers were made, did not come to possess an area exceeding 50 acres. While the present size of holdings was not disturbed, for future acquisition, the limit was placed at 30 acres. The *Bhumidars* were prevented from mortgaging their lands with possession. In the event of such mortgage, the mortgagee would be deemed to have purchased the land and would acquire the rights of a *Bhumidar*. In regard to the fixation of land revenue, *Bhumidars* and *Sirdars* would be jointly and severally liable for the revenue assessed on the village. In the case of land under personal cultivation, the land revenue would be equal to the present revenue and the local rates on such land. In the case of *Sirdars* who acquired *bhumidari* rights, it would be equal to half of his rent. In other cases, it would be equal to his present rent.

The total estimated compensation amount was Rs. 150 crores of which Rs. 80 crores would be in the form of rehabilitation grants. The payment could be in cash or in bonds or partly

in both as may be prescribed. As a part of the Zamindari abolition schemes, it was decided to reorganise the system of land records in the State. This involved curtailment of powers of the village *patwaris* and other village revenue officials. A new cadre of *lekhpals* with different service conditions and scales of pay was set up. As a result of further study and experience of the working of the original Act, the U. P. Land Reforms (Supplementary) Act was enacted which removed certain deficiencies noticed in the earlier Act. Legislation was also enacted to scale down the secured debts of the landlords who became incapable of discharging them on the abolition of the Zamindari system.

The Amendment Act, 1956, sought to remove (a) certain defects and deficiencies observed in the Act of 1950, in the context of the consolidation of holdings scheme and (b) to remove certain difficulties experienced in the realisation of *Gaon Samaj* dues. The Act also provided for extension to *adivasis* of the facility of acquiring *bhumidari* and *sirdari* rights on evacuee lands.

The (U.P.) Kumaon Zamindari Abolition and Land Reforms Bill, 1957, provided for (a) acquisition of the right of *hissedars* on payment of compensation, and (b) introduction in Kumaon of land tenures similar, as far as possible, to those introduced in the rest of the State.

West Bengal

The West Bengal Estates Acquisition Amendment Bill, 1953, declared that the Permanent Settlement made in 1793 had outlived its usefulness and was unsuitable for the needs of a progressive society. It was roughly estimated at the time of the introduction of the Reforms Bill in 1953, that there were 80.2 lakhs of cultivating owners and dependants, 29.9 lakhs of *bargadars* and dependants and 30.4 lakhs of landless labourers and dependants. Out of 1.17 million acres of cultivated land, 400,000 acres were held by intermediaries, 1.05 million acres by ryots and 800,000 by under-ryots. A very substantial proportion of the land held by the owners was cultivated by the *bargadars*. The distribution of holdings according to size showed that the number of families holding lands in excess of 26 acres was 40,000 with 1.4 million acres. According to a West Bengal Government Publication, only one out of 50

cultivators had just sufficient land for maintaining his family in moderate comfort ; 2 out of 50 were petty owners with an area of less than 50 acres and the remaining eked out a miserable existence as *bargadars* and agricultural wage-earners.¹²

The objects of the legislation were (1) to eliminate the interests of all zamindars and other intermediaries by acquisition on payment of compensation, (2) to permit the intermediaries to retain possession of the *Khas* lands up to certain limits and to treat them as tenants holding directly under the State, (3) to acquire the interests of zamindars and other intermediaries in mines, etc.

The compensation to be paid would be in multiples of net income on a graded scale. The intermediary would also be entitled to receive in cash an *ad interim* compensation at the rate of one-third of the net annual income from his estate. The estates would vest in the State within a definite period, irrespective of whether the record of rights or compensation assessment roll had been finalised or not.

This legislation brought some 400,000 acres of land held by intermediaries into the hands of Government for redistribution among land-hungry peasants. In order to meet the additional demand on land by landless labourers and *bargadars*, a special clause was inserted, under which Government was empowered to acquire surplus *Khas* lands above 100 bighas or above 33 acres in the possession of big *latedars* or *jotedars* who were classified as ryots on payment of compensation at prescribed rates. Government also decided to vest all control in land in the hands of statutory bodies like *gram sabhas* and Panchayats to be set up in due course.

By a later amendment to the Act in 1955, powers were conferred on the State Government to prevent *mala fide* transfers by landlords seeking to avoid the provisions of the Zamindari Abolition Act. The West Bengal Land Reforms Act 1956, aimed at remodelling the existing system of land tenure by providing for such matters as the rights and obligations of raiyats, etc., and imposed a ban on sub-letting and on future acquisitions of land. The Act provided for a ceiling on future acquisition of land at 25

¹² West Bengal Independence Anniversary Number, 1953, p. 31.

acres ; limited the landlord's right to resume two-third of the area for personal cultivation, but if he held less than the prescribed area, he could resume the entire area ; and if the landlord failed to bring the land under personal cultivation or gave it to another bargadar within 2 years of resumption, the holding was liable for sale in which the bargadar had the first option. The Act also replaced the West Bengal Bargadars Act, 1950 which expired on 31st March 1956.

Delhi

The Land Reform Committee (1952) aimed at unifying the two prevalent systems of tenure. The Zamindari system was to be disintegrated and the tenants were to be raised to the level of peasant proprietors. From the very outset great attention was paid to evolving a method of reform which would be the least expensive. The state *Zamindars* being essentially petty proprietors, due consideration had to be given to the procedure of paying them adequately for the interests to be acquired. The large body of tenure and sub-tenure holders were to be replaced by a single body of tenure-holders, called *Bhumidars* and one of the sub-tenure-holders, called *Asamis*. The sub-letting of land by the former was prohibited except when he was a minor or physically disabled. Such lessees would also be *asamis* and hold the land until the disability lasts. The *asamis* would remain the only class of tillers to pay rent. No stable rights would accrue to them over land cultivated by them. Compensation would be paid by the beneficiaries themselves in multiples of rent. A ceiling was fixed on *khudkasht* lands held by the proprietors at 30 'standard acres' for each unit of family consisting of five members. The ceiling would vary between 30 and 50 standard acres according to the size of the family and also according to the quality of the soil by the addition of 10 to 20 per cent. The *Gaon Sabhas* were given powers of entering into possession of land left by heirless *asamis*, power to let out vacant lands, rights over common lands, etc. Co-operative farming was also encouraged. In order to avoid multiplication of uneconomic holdings, a restricted table of devolution was laid down for all *bhumidars* as well as *asamis*. In 1956, the Act was amended to remove procedural and technical difficulties experienced in the working of the Act of 1954.

Himachal Pradesh

There were two dominating systems of tenure in the State, the *pattedari* and *bhaichara* system. Under the former all the lands were divided and held severally by the different proprietors according to customary rights, each proprietor managing his own land and paying his own share of land revenue ; but all were jointly responsible to Government for payment of land revenue. Under the *bhaichara* system, the landowners were liable independently to pay their share of land revenue. Apart from these, there were other grantee estates. There were also other practices which were not conducive to the interests of the actual tillers of the soil. The *bethu* system of serfdom under which the scheduled castes suffer as a class was abolished on the integration of the State. The *bethus* were conferred full occupancy and proprietary rights on payment of small amounts. Many other feudal levies which prevailed in the State were also abolished. The payment of land revenue partly in cash and partly in kind was converted into cash basis of average money value of the demand for a short term of years. The hardships created by the *Ala Malkiat* which vested in the State rights in all lands were removed by conceding the rights to the holders. There were many and extremely oppressive cesses which varied from 2 to 40 per cent of the land revenue demand. These have now been rationalised at 25 per cent on considerations of equity and uniformity. The various land laws which were primitive, reactionary and widely divergent have been substituted by a uniform law, procedure and practice relating to land revenue administration.

Under the Act of 1953,¹³ all rights, titles and interests of landowners and tenants, who had land in the district of Chamba exceeding 30 acres in area or in the rest of the State, of which the assessed land revenue exceeded Rs. 125 per year, were extinguished including rights in land, cultivable or barren and other types of land. All rents, cesses and local rates in respect of any such lands were payable to the State Government. The displaced landowners or tenants were entitled to compensation due from the date of acquisition with interest at the rate of 2 per cent per annum. The compensation would be in multiples of the net income after making the prescribed

¹³ The Himachal Pradesh Abolition of Big Landed Estates and Land Reforms Act, 1953.

deductions. A tenant was entitled to occupancy rights on three-fourths of the area of his holding for which he was not required to pay anything. The landlords were allowed to retain for personal cultivation one-fourth of the land, but the tenant was given the option to purchase occupancy rights over this one-fourth area on payment of certain prescribed amounts. Similarly rents were fixed at not more than one-third of the produce.

CHAPTER IX

LAND REVENUE

ANCIENT AND MEDIAEVAL SYSTEMS

Only a brief mention may be made here of the pre-British land revenue system.¹ It is well known that under the ancient Hindu kings, Government demand by way of land revenue was usually one-sixth of the produce, paid usually in kind but in some cases in cash. The early Muslim rulers did not introduce any change in the system and the old "village communities" continued to function through the ages right up to the advent of the British. Ala-ud-din Khilji raised the Government's share to half the gross produce. The Tughluqs again reduced it to one-tenth or one-eleventh of the gross produce, and injunctions were issued to Revenue Officers that they should look more to the extension of cultivation than to the enhancement of the rate for increase in revenue. To Sher Shah belongs the credit of having introduced the system of measurement in place of the old system of sharing. Lands were classified, standard yields assessed and the revenue demand fixed at one-third of the average on all classes of land. Sher Shah's reforms became the basis of Akbar's land revenue policy and administration, with the difference that Akbar proceeded to convert the grain rates assessed by Sher Shah into cash rates based on the average prices prevailing in different places. In the later days of the Moghul Empire, the State's claim was increased to one-half of the gross produce. The Peshwas accepted the basis of this old assessment, but with the weakening of the central power and the political unsettlement of the period, there developed in different parts of India a system of revenue farming which ensured to the rulers a steady income without the bother of assessment, collection and administration. At first, these revenue farmers were not hereditary; they were just public officials, but the centrifugal tendencies of the time greatly strengthened their position and weakened corres-

¹ This section is based on Dr. Radhakumud Mukerjee's Note on the Indian Land System in the Bengal Land Revenue Commission's Report, Vol. II.

pondingly the position of the agriculturists. In course of time, there developed a complexity of tenures and revenue systems which made the task of the early British officials very difficult.

The different systems of settlements that have evolved in India can be broadly classified into (i) permanent or those in which assessment was fixed in perpetuity, (ii) temporary or those in which assessment was fixed for a definite period. They can also be classified on the basis of tenures as (i) Zamindari in which assessment was fixed on an estate held only by a landlord, (ii) Mahalwari in which assessment was fixed on a village or mahal, jointly or severally, and (iii) Ryotwari in which assessment was fixed on the holding of a ryot.

ASSESSMENT UNDER PERMANENT SETTLEMENT

The principle underlying the assessment in Bengal, Bihar, and Orissa was obviously that the State was entitled to the entire rental, except the expenses which would have to be incurred by the zamindars and a small margin as his profit. It was on this understanding that the State claimed nine-tenths or ten-elevenths of the rental, leaving the remainder to be taken by the zamindar as a surplus for himself. The revenue demand for Bengal, Bihar and Orissa was fixed at Rs. 268 lakhs.

The amount of land revenue thus fixed with reference primarily to the needs of the East India Company was also determined so as "to include in advance the cash value of future agricultural developments of the country and to take credit in the present for the unearned increments of the future."² For several years after the settlement, there was widespread default in payment, and the landlords were forced to sell their estates. In course of time, however, as waste lands were brought under the plough and the value of land increased, this burden became relatively lighter. This, however, meant that it also became more unequal. "The increment in the value in an estate which was largely undeveloped at the time of the settlement may be many times that which accrued in one which was fully developed when the settlement was made."³

² Dr. Radhakumud Mukerjee, "Note on the Indian Land System" in the Bengal Land Revenue Commission's Report, Vol. II, pp. 219-221.

³ Report of the Indian Taxation Enquiry Committee (1924-25), pp. 42-43.

ASSESSMENT UNDER TEMPORARY SETTLEMENT

The method of assessment under the periodical settlement system is almost uniform. An area for which a settlement is undertaken is cadastrally surveyed and classified according to the fertility of soil. The rate of revenue is then worked out by calculating the yield of the principal crops, by noting the price of the agricultural produce, the rental and sale value of the land and the ordinary expenses of cultivation. Other factors such as physical configuration, climate and rainfall, proximity to markets, means of communications and standard of husbandry are also taken into consideration in the determination of the assessment at the time of the settlement. The assessment so determined is fixed for a term of years varying from 15 to 40 years. The usual period is 30 years. When a revision of the settlements becomes due, the various changes that have occurred since the last settlement in (i) the area of the land and holdings and (ii) the price and yields of agricultural produce, are taken into consideration.

ASSESSMENT UNDER RYOTWARI

The ryotwari system of assessment can be illustrated by the position in Madras which as modified, continued upto the period of recent reform. There are two principles that govern the processes of settlement in Madras.⁴ The first is that assessment is on the land and does not depend on the kind of crops grown, except in the case of "wet" land, where it includes a charge for irrigation. The soil is first classified according to productive capacity, the normal yield is calculated on each class of soil after a series of experiments, and this is then converted into money value, not at the current rates which may be abnormal, but at the average of prices prevailing during the preceding 20 years, excluding famine years. The second principle relates to the estimation of the net profit of each cultivator. To obtain this, various deductions are made from the gross produce, so as to allow for seasonal variations, unproductive areas, cost of cultivation, etc. Of the net profit thus arrived at, 50 per cent is claimed as the maximum Government share. In practice, the revenue demand is often less, the 50 per cent rule applying only to land enjoying the greatest natural advantages. At the time of resettlement after 30 years, no change in basic

⁴ Bengal Land Revenue Commission's Report, p. 124, ff.

principles is made. An enhancement in Government demand is made if there has been a rise in prices during the interval. Government claims no share of the increase in profits due to the improvements made by the cultivator himself, but it does claim a share in the profits due to some general improvement due, for example, to the introduction of a railway.

In Bombay, in the early stages of British rule temporary settlements were first tried. Regular Survey Settlements were commenced in 1824-28, but they failed. The Government's share was fixed at 55 per cent of the produce. This proved oppressive. A resurvey was commenced in 1835, lands were classified into nine different classes according to their quality, and settlements were made directly with the ryots. The assessment was fixed without any reference to the cultivator; and when those rates were introduced, the holder of each field was summoned by the Collector and informed of the rate at which his land would be assessed in future; and if he chose to retain it on those terms, he did; if he did not choose, he threw it up.⁵ Wherever the Ryotwari system had been introduced—sweeping aside village communities and intermediate landlords—the agriculturists were a nation of paupers.⁶ This settlement was made for 30 years. Before a new settlement was to be made, the issue of introducing a Permanent Settlement in Bombay was taken up and decided against, as the prices were then rising. To the indebted peasantry, the revised settlement meant additional hardship which was one of the causes of the Deccan Riots of 1875. Besides the other measures of relief provided for the peasantry, the most significant step was the enactment of the Bombay Land Revenue Code of 1879. Under this Code, revenue on land was assessed according to the purpose for which the land was used, whether it was agriculture, or building or some other purpose. The rate of assessment was arrived at empirically with reference to general economic considerations, and in practice was based on the actual rents paid rather than on any theoretical considerations of the net produce.⁷ The amendment in 1939 to the Bombay Land Revenue Code, in fact, definitely recognised rental value as the

⁵ Evidence of Goldfinch. Fourth Report of the Commons' Select Committee, 1853, quoted by Dutt, *Op. cit.*, p.53.

⁶ Dutt, p.59.

⁷ Indian Taxation Enquiry Committee's Report (1924-25), p.60.

basis of assessment. It also empowered the Provincial Government to revise assessments in any year in accordance with changes in prices.

ASSESSMENT UNDER MAHALWARI

The assessment under the Mahalwari system aimed at fixing a moderate revenue to be paid by each village as a whole.⁸ The basis of assessment was, what are called, "net assets". The maximum revenue demand which was originally fixed at one-half of the net assets was reduced to one-fourth in 1928 and net assets were clearly defined for the first time to mean the estimated average annual surplus produce of an estate or group of estates after deduction of the ordinary expenses of cultivation. An elaborate procedure had to be adopted for determining in terms of money the value of the net assets. The practice was to calculate net assets on the basis of rents paid by tenant cultivators who usually paid a fixed share of the produce. These estimates were then checked up with reference to the cash rents prevailing in the assessment circle. The produce estimate was based on several factors, such as the average acreage of all crops sown and matured, the average yield per acre of each of these crops, the average obtainable in the village and the actual share of the gross produce received by landowners.⁹ The net assets were thus calculated "upon landlords' rentals and not upon owner-cultivators' profits." The assessment for the circle having thus been determined, it was thereafter distributed village by village and for all the holdings, in due consultation with the landowners.

Though the general pattern of land revenue settlement and assessment in India broadly follows the above classification, the development of the different systems has not been on the same lines in all the States. This disparity has been further widened with the integration of the former princely States where except in a few States administered by retired or deputy officers from British India, there were no regular settlements or systems of land revenue. The result is that, at one end, there are States like the Punjab, Bombay (before the merger of certain princely States), Madras,

⁸ For a fuller report of the system see the Report of the Punjab Land Revenue Committee, 1938.

⁹ *Ibid.*, p. 7.

Assam and Mysore in which practically all the land has been surveyed, measured and settled on some definite principles. At the other end, there are States like Rajasthan, Saurashtra and Madhya Bharat where there are still large portions of unsurveyed and unsettled lands and where settlements made in the past followed no scientific principles and have been more or less the result of political conditions prevailing in the States at that time. In between these two extremes, there are States like Uttar Pradesh and Madhya Pradesh where there have been regular settlements on lands, but owing to the prevalence of the Zamindari system, several intermediaries have crept in.

Even under recent reforms, the revenue realised from the former tenants is the same as the rent paid by them previously to the intermediaries and has not been revised on the abolition of the intermediaries. It also appears that in these States, lands have not been re-settled on the accepted principles of revenue assessment, *viz.*, productivity of the land, cost of cultivation, economic facilities, etc. But considerations such as past history, political expediency and the administrative difficulties seem to have mostly influenced the rates of land revenue recently fixed and these are expected to continue for some time. Conditions in the States of West Bengal, Bihar and Orissa are also similar and in quite a large part of these States, there was no organised land revenue administration at the lower level, because of the Permanent Settlement. The records of land in most cases are not complete and accurate.

BASIS OF LAND REVENUE ASSESSMENT: GENERAL

It seems hardly necessary to describe in great detail the methods of assessment in all the States.¹⁰ The existing methods in different States may be summed up, following the Taxation Enquiry Commission's Report, as follows:

Though the States follow different methods in calculating the land revenue payable to Government, certain common principles are discernible. Under these principles, the methods can be classified as follows: (i) net assets or economic rents ; (ii) net

¹⁰ For details see the Report of the Taxation Enquiry Commission (1953-54), Vol. III, pp. 263-284.

produce or annual value; (iii) empirical; (iv) rental value; (v) capital value and (vi) gross produce.

Net Assets or Economic Rents: The net assets are defined as "the estimated average annual surplus of an estate or groups of estates remaining after deduction of the ordinary expenses of cultivation as ascertained or estimated." In other words, it is rent less all costs incurred in earning the rent. The cost incurred by the landlord is deducted from the gross produce which is valued in terms of money at the commutation rate, usually the average price of a particular crop for the preceding 20 years or more. This method is prevalent in the Punjab, Uttar Pradesh, Madhya Pradesh, Himachal Pradesh, Pepsu, Ajmer and Delhi. In the temporarily settled areas of Bihâr, Orissa and West Bengal, the principle is adapted to local conditions.

Net Produce or Annual Value: The average outturn per acre of the staple crops for different kinds of soil is at first determined on the basis of crop cutting experiments and enquiries in the field. The gross value is then estimated on the basis of commutation price, that is, the average price of the preceding 20 non-famine years. The net produce or annual value is then derived by deducting from the gross value, the cultivation expenses and also by making certain allowances for bad seasons. Cultivation expenses include expenses on ploughing cattle, agricultural implements, seed, manure, wages of labour required for sowing, transplanting, reaping, threshing, etc. Madras is the only State which has accepted this principle as the basis of land revenue assessment.

Empirical: The method is called empirical because at the time of the settlement several factors are taken into consideration, such as the economic background of the tract, the area under cultivation, the trends in the cultivated area and agricultural occupations, the trends in material condition of the people, the proximity of markets, the facilities of communications, the fluctuations in prices of main staples, land values of the tract, etc. The aggregate amount of assessment is first fixed for the whole of a tract and then distributed over the villages and individual survey numbers by means of maximum rates for the various classes of land. Bombay, Hyderabad, Mysore and certain areas in Rajasthan, Manipur and Tripura follow the empirical basis.

Rental Value : The main emphasis in all the above States except Madras is on rental value. Though the basis of assessment is net assets or empirical, the general procedure is to determine the actual rents received by the landholders and then to fix the assessment after allowing for certain deductions. In recent tenancy legislation, the trend is to fix the maximum rents payable by the tenants. In future, therefore, the rental value cannot provide a reliable basis for determining the land revenue.

Capital Value : Capital value has not been adopted as the main principle in any State though at the time of the settlement, the sale and mortgage value of the land forms one of the factors determining land revenue.

Gross Produce : Gross produce was the basis of assessment before the adoption of scientific method. In Assam, this basis still continues and the limit of assessment for any tract has been fixed at 10 per cent of the value of the gross produce of that tract.

LAND REVENUE ADMINISTRATION

The administrative machinery for the collection of land revenue is more or less of a uniform pattern in all States except in areas which were under Permanent Settlement. The chief revenue authority is the Board of Revenue. In the Punjab, the Financial Commissioner performs this function, while in Bombay, the Revenue Tribunal and the Government share the functions. Usually, the States are divided into divisions or districts under a Commissioner or Collector respectively. The districts are again divided into *tehsils* or *talukas* under a *Tehsildar* assisted by *Naik-Tehsildars*. Under these, the village officers, *lambardars* or *patils* who collect the land revenue and *patwari* or village accountants, comprise the well-organised village administration. The recent trend is to appoint paid officers for these hereditary posts.

Developments after Independence

The developments which have taken place after Independence have set new and important tasks to the revenue administration of the States involving significant changes in the agrarian pattern of the country and, therefore, in the land revenue systems as well. The integration of the former princely States with India and the

merger of their areas, some with Part A States and some with Part B and Part C States, posed problems of great magnitude. Several measures of tenure and tenancy reforms¹¹ have been undertaken by these State Governments under the directives of the Central Government. These, obviously, have indicated the need for a vital change in the old revenue policy. However, the problems created by the diversity of tenures and assessment in the former princely States could not be adjusted immediately on their integration and reconstitution. The orthodox methods of settling the assessments in these areas would have necessitated survey and settlement operations on a large scale, which would have taken a very long time to complete. Therefore, interim measures, differing in their nature according to the conditions of the areas, have been adopted by the States to bring about some uniformity in the assessments. These measures comprise :

- (1) *Postponement of Resettlements* : The settlements of lands were postponed in almost all States even on the advent of provincial autonomy for various reasons, particularly, the unsatisfactory condition of the agricultural economy and the exception taken to the basic assumptions of the system of revision settlements.
- (2) *Adoption of Summary Resettlement* : The Rajasthan Government adopted the rough-and-ready process of classifying the lands for assessment within a period of two years dispensing with orthodox process of detailed measurements, soil classification and preparation of maps, etc. The assessment arrived at thus was to continue till regular settlements were undertaken.
- (3) *Ad hoc Settlements* : In Saurashtra, the crop-share system was converted into an *ad hoc* cash assessment on the basis of the average of the last 15 years' recovery. As this resulted in steep enhancement of revenue in some cases, the assessment was later rationalised by refixing it on the basis of one-fourth and one-fifth of the produce for the dry and irrigated areas respectively. In the State of Himachal

11 Discussed in Chapter VII.

Pradesh, a similar procedure was adopted, converting assessment in kind into cash on the basis of the average money value of the crops.

- (4) *Levelling of Rates* : In the merged areas of Part A States, where the assessment was found to be much higher than that prevailing in the neighbouring areas, concessions were given in the assessment. While it was possible to level down the assessment rates wherever they were higher, it was difficult to increase the rates in the merged areas where they were much lower. In Madras, for example, the Government could not devise any procedure to level up the assessment in the merged State of Pudukottai. In regard to the protection of tenant's rights, action was taken by the States concerned not only to prevent the eviction of tenants but also for the restoration of those who were evicted without *bona fide* grounds.

INCIDENCE OF LAND REVENUE

The incidence of land revenue varies considerably between different parts of the country, as a result of the diversities in the methods and basis of assessment. The Indian Taxation Enquiry Committee (1924-25) calculated the average percentage of land revenue to the rental value of the land in some provinces and pointed to the very wide variations as between different areas. As a consequence, it was impossible to say what was the incidence of the land revenue upon the land.¹² The Committee recommended that the annual value defined as "the gross produce less cost of production, including the value of the labour actually expended by the farmer and his family, and the return for enterprise," would be an appropriate basis of land revenue. In the case of rents controlled by Tenancy Laws or by custom having the force of law, or where the rent is fixed by the Settlement Officer, such rents should be taken as annual value. This, they felt, would place the whole system on a scientific basis by allowing for all the expenses of cultivation, and if a uniform rate of 25 per cent of the annual value was taken as the standard rate of assessment, the burden of land revenue would be fair and reasonable.

¹² Report, pp. 76-77.

SUBSEQUENT REFORMS

Various attempts were made in the provinces to modify the land revenue system in the light of these considerations. The most notable was that made in recently settled districts of the Punjab, where a greater elasticity was sought to be imparted to the land revenue demands by linking them up with prices of agricultural products. The land revenue computed according to usual rules was laid down as the maximum, but it was not to be paid in full unless the general price level of the chief staple products of the district during the two preceding seasons was as high as the computed price level. If the price was lower, a proportionate remission was granted. The Punjab Land Revenue Committee recommended as an experimental measure a plan whereby the land revenue demands could not only be lowered but raised, the maximum enhancement being limited to 50 per cent of the rise in prices. They also recommended a substantial lowering of the land revenue demands; all those paying not more than Rs. 25 as land revenue were to be charged only at $\frac{3}{4}$ th of the standard rates. Further, the Committee suggested a reduction of 50 per cent for all owner-cultivators paying land revenue upto Rs. 10 and a flat reduction of Rs. 5 for those paying between Rs. 10 and Rs. 25. For higher incomes, the Committee advocated a temporary surcharge beginning with $6\frac{1}{4}$ per cent for those paying land revenue between Rs. 250 and Rs. 500 and ending in 25 per cent for those paying more than Rs. 5,000. Measures for the imposition of a surcharge along these lines have been adopted in the U.P. More important from the point of view of ability to pay are the agricultural income-taxes levied in Assam, Bihar and Travancore-Cochin on a fairly progressive basis.

On the whole, however, the wide disparities in the basis and rates of assessment, and also in the incidence of land taxation remained unaffected in the main, as no systematic attempt had been made to revise the entire system in accordance with the recommendations of the Indian Taxation Enquiry Committee which reported about 20 years ago. The vast changes brought about by the land reforms by introducing difficulties in the determination of the rate of land revenue for the individual cultivator's holding, have aggravated the disparities in assessment. Those whose ability to pay is the highest are taxed at the lowest rates.

The erstwhile proprietor has merely to pay a nominal sum as land revenue. Apart from the complications introduced by the reforms in land tenures and tenancies, certain problems have also been posed by the effects of World War II, Partition and post-Independence changes. It has been noted that except in the permanently settled areas, the periodical settlements were the very basis of land revenue assessment. Several of these settlements became due for revision in the last 20 years. This could not be taken up because of the steep fall in prices which occurred in the early 'thirties, and, later, because of the inflationary conditions that arose during the war. During and after the war, the vast expansion of administrative activity in the country affected the availability of trained personnel for this particular type of technical work of settlement. All these difficulties indicated that the old settlement procedure was no longer suitable. Consequently the State Governments adopted different measures for the assessment and adjustment of land revenue. Among the principal measures adopted were the following:

Recent Methods of Assessment

The Sliding Scale System : Under this system, the maximum land revenue assessment for the whole period is based on a standard commutation rate, worked out for each assessment circle. The average of the price prevailing during the previous 20 years is taken as the commutation price. But the assessment at the maximum rate is not collected, unless the general price level of the chief staple product of the district during the marketing season of the two preceding harvests was at least as high as the commutation price level. When the price level was below the standard rate, proportionate remissions were granted in units of 5, 10 or 15 per cent. In calculating the remission due for any particular area, the relation of harvest index figure to the standard index figure is taken into account.

A Low Flat Rate plus an Agricultural Income-tax : The system of levying a flat rate with a progressive income-tax on higher brackets of agricultural income has been in adoption in the State of Travancore-Cochin (Kerala) since 1946. The State levied a uniform levy of

14 annas per acre of land, irrespective of whether it was wet, dry or garden land and of the tenure on which it was held. The basic rate has since been raised to Rs. 2 per acre. Under this system, there is no longer the necessity for conducting elaborate surveys and settlements, while the introduction of agricultural income-tax ensures an element of progression in the taxation of incomes from land over a certain level.

Surcharge on Land Revenue : The imposition of a surcharge on land revenue has been justified on the ground that (1) it would be difficult and inequitable to fix assessments on the basis of abnormal prices at regular settlements, and that (2) the State should find some procedure by which the increase in agricultural income due to high prices is shared by the States to some degree. The States which have imposed surcharges are Hyderabad, Punjab and Madras.

Land Revenue—Rent or Tax ?

The question has often been raised whether land revenue is a rent or a tax. If it were a rent, there would evidently be no question of its burden, for by definition rent is a surplus over all the items of expenditure on cultivation. This controversy raises the further issue whether the State in India is the landowner, and whether State ownership of land has been a recognised maxim of Indian polity from pre-British times. These issues are almost academic in the changing concept of a Welfare State. The facts of the case are conflicting, and no definite answer seems possible. The broad fact is, however, undeniable that land revenue ought to be, whatever it may have been in the past, a share claimed by the State with due regard to the taxable capacity of the party paying it; it must be levied in accordance with the well-known canons of fair and equitable taxation. This implies, firstly, that uneconomic holdings should be exempt from taxation; secondly, that taxation on land should be on the principle of progression; and thirdly, that there should be an elasticity about its burden as well as procedure in view of diverse climatic and price factors.

AGRICULTURAL INCOME-TAX

The agricultural incomes in India have been exempted from the general income-tax except for two short periods of nine years

in all between 1860 and 1865 and 1869 to 1873. The position remained unchanged until the passing of the Government of India Act in 1935, though the Indian Taxation Enquiry Committee had favoured in principle the imposition of an agricultural income-tax.¹³ A separate provincial levy on agricultural incomes became possible only after this Act. Even under the present Constitution the two types of income are separated and agricultural income taxation is assigned to the States. Bihar was the first State in India to levy a tax on agricultural incomes in 1938, after a lapse of nearly 60 years. The other States which now levy the tax are: Bihar, Assam, Bengal, Orissa, Uttar Pradesh, Hyderabad, Kerala, Madras, Rajasthan, and Madhya Pradesh. The existence of large plantations of a commercial character and big landholders in the permanently settled areas of some of the States provided the basis for the levy of an agricultural income-tax. Madras has restricted the tax to income from plantations. In the former princely States of Hyderabad and Travancore-Cochin (Kerala), agricultural incomes along with non-agricultural incomes were taxable even before the integration of those areas with the rest of India. After integration only agricultural income-tax is levied by the State Governments.

The agricultural income-tax is charged on the total agricultural income of the previous year of every person, including an association of individuals, undivided Hindu family, a firm or a company. The rates of levy have been laid down in the enactment itself in some of the States, while in others, the rates are fixed annually under the Finance Acts. In a few States, incomes have also been subjected to a super-tax. The tax rates in all the States are based on the slab system. Apart from the exemption granted to levels of income, certain types of agricultural incomes are also exempted. The assessment procedure in respect of agricultural income-tax has been found to be inconvenient to the small landholders as the assessee is asked to maintain elaborate accounts.

¹³ The Indian Taxation Enquiry Committee observed in 1925: "There is no historical or theoretical justification for the continued exemption from the income-tax of incomes derived from agriculture. There are, however, administrative and political objections to the removal of exemption at the present time. There is ample justification for the proposal that incomes from agriculture should be taken into account for the purpose of determining the rate at which the tax on the other incomes of the same person should be assessed, if it should be administratively feasible and practically worthwhile."

Regarding the administration of tax, separate Agricultural Income-tax Departments have been established, except in Uttar Pradesh, where the District Revenue Officers are entrusted with the function.

LAND REVENUE UNDER REFORMS

The significance of land revenue has considerably changed over the long period of its history. The change is noticed in (i) the burden on the person who pays it, (ii) the place which land revenue occupies in the composite fiscal pattern of the country, and (iii) the general level of land revenue in relation to the levels of agricultural prices. It is claimed that progressive monetization, the development of internal transport, the growing commercialisation of agriculture and the general evolution of an all-India market with a steady support to local prices have served to lighten the burden of land revenue in the decades that have passed.

From 1890 upto the period of World War I, the level of land revenue would appear to have been fairly steady in spite of the price being 5 to 6 times higher. Expressed in terms of the price of foodgrains, the land revenue receipts declined from 1873 to 1912.¹⁴ Thereafter, there was a sharp rise in agricultural prices; foodgrains prices almost doubled. This led to a substantial reduction in the burden of land revenue collected even after adjustment for the rise in foodgrains prices. After 1929, however, there was a trend of decline in prices as a result of the depression. Expressed in terms of constant prices, the burden of land revenue was perhaps two-thirds higher during the period 1930-37. The World War II, by causing an increase in the price of foodgrains to more than four times the pre-war level, once more drastically reduced the burden of land revenue. Since 1948, the burden, however, seems to have shown an increase.¹⁵

Apart from the changes in the burden in the different periods, the general inference is that the long-term trend has been in the direction of a steady and, latterly, drastic reduction in the burden. This is also confirmed by the steady decline, since the middle of

¹⁴ Taking the base year as 1873=100, the index was 89 during 1873-82; 94 for 1883-92; 92 for 1893-1902 and 84 for 1903-1912.

¹⁵ Most of this is reported to be statistical, being the result of the merger of parts of certain former princely States with Part A States and the conversion of rent into land revenue in consequence of the abolition of Zamindari.

the last century, in the proportion which the land revenue collections bear to the total revenue receipts of the Centre and the States. The following Table indicates the receipts from land revenue as proportion to total revenue.

RECEIPTS FROM LAND REVENUE AS A PROPORTION OF
TOTAL REVENUE (CENTRE AND STATES)

1793-94	..	..	..	..	69.0	per cent
1808-09	..	..	..	..	61.1	" "
1818-19	..	..	..	..	73.1	" "
1839-40	..	..	..	..	70.6	" "
1850-51	..	..	..	..	66.5	" "
1871-72	..	..	..	..	42.8	" "
1881-82	..	..	..	..	35.5	" "
1891-92	..	..	..	..	36.5	" "
1901-02	..	..	..	..	33.9	" "
1911-12	..	..	..	..	31.3	" "
1938-39	..	..	..	..	16.1	" "
1953-54	..	..	..	..	8.6	" "

Source : Report of the Taxation Enquiry Commission, 1953-54, Volume III, Government of India, p. 216.

The decline in the importance of land revenue was due to the growth and increased importance of new forms of taxation, such as income-tax, customs and excise at the Centre and sales-tax and other taxes in the States.

RECOMMENDATIONS OF THE TAXATION ENQUIRY COMMISSION (1955)

The Taxation Enquiry Commission (1955) has observed after examining the economic aspects of the evolution of the land revenue system in India, that administrative considerations point to the need for certain modifications in present system. While they agree that in many matters of important details arising out of past history or related to local conditions, there is bound to remain a justifiable diversity in the land revenue systems of different States, in other and more basic matters, it would be both advisable and feasible to aim at a minimum degree of uni-

formity in the policies pursued by the States. Some of these matters mentioned by them are: nature of tenure, manner of initial fixing of assessment, the broad method of revision of assessment and the limits of increase or decrease within which it will operate, the place of land revenue *vis-a-vis* local bodies and the place of agricultural income-tax *vis-a-vis* land revenue. The integration of the country, the land reforms that are in progress and above all, the many common problems which have arisen under the stress of price fluctuations, have all tended to the formulation of a broad common pattern as indicated above.

(a) *Agricultural Income-tax*

The Commission recommends that an agricultural income-tax on the higher agricultural incomes should be adopted by all the States, because of the greater equity it brings into the system, if not of the revenue it brings to the exchequer. While it will not be practicable to aim at achieving uniformity in rates, it should be possible to have uniform limits of exemption. It suggests Rs. 3,000 as the reasonably adequate limit of exemption.¹⁶ Even when an agricultural income-tax is levied, several anomalies will remain. Therefore, from the point of tax equity, the eventual policy should be to merge agricultural income with non-agricultural income and levy one income-tax, the proceeds being made divisible between the Union and each State, in the proportion of the two categories of income. As a first step in this direction, the States should adopt a system of surcharges on agricultural income-tax, the rates of surcharge being fixed so as to vary with the assessee's non-agricultural income. The surcharge will be on the agricultural income-tax, expressed as a fraction of it.

(b) *Revision in Settlement*

The Commission recommends that the basic pattern of settlement and revision, while largely similar to the existing ryotwari pattern, should make a departure from it in significant respects. The revision of settlement should be divorced from small units and local prices and be based instead on the State or within the State, on homogeneous regions. For this purpose, existing disparities of assessment should first be corrected with reference to

¹⁶ In Hyderabad, the exemption limit is Rs. 10,000/-.

a criterion that can be applied on a State-wide basis. Thereafter, at the "standardised" level, which the assessments then assume, they should be revised for the State as a whole or for the regions, at intervals which are neither unduly short nor unduly long. Each such revision whether upward or downward should be within strictly defined limits and should be effected with reference to an adjusted price factor worked out for the whole State or for each of the region.

Where assessments are made on an *ad hoc* basis for the first time, they must be fixed on an adequate standard even at the very commencement and related to a criterion common for the whole State. Within the limits set for revision, the standardised assessment should continue indefinitely. All surcharges on the standardised assessments should be by local bodies for local services. In other words, as a source of revenue for State Governments, land revenue should be "frozen" within the narrow variations of a standardised level of assessment and all further tax contribution from land in the form of cesses and surcharges on such revenue should be left for the exclusive use of local bodies. The land revenue should be revised once in 10 years with reference to the changes in price levels. The period of revision cannot be as long as the present 30 or 40 years. Many of the difficulties which have arisen and most of the inelasticity of land revenue receipts are traced to a period of guarantee which in changed price conditions has proved to be unduly long; nor can the period be too short. If the assessment is to be fixed annually or bi-annually, the relative fixity and stability which now characterise the land revenue system will be replaced by much hardship and uncertainty. The method of revision adopted should be such that it can be carried out more or less automatically on the basis of the price levels without the intervention of an elaborate administrative machinery operating on small units over long periods at disproportionate cost. In adjusting land revenue to price changes, the following points are suggested for consideration: (i) moderate fluctuations should not be allowed for at all; (ii) increase or reduction should not be proportionate to price changes; (iii) the significant factor should be the incidence of land revenue, *i.e.*, the change in the net income or net produce or profit of the cultivator and not the value of his gross produce; in other words, cost of produc-

tion is as relevant as the price of the produce; (iv) the safeguard for the cultivator in the event of a fall in prices should be greater.

The Commission have also made certain suggestions for the measurement of price changes. These relate to the composition as well as the range of the price index that should be adopted for measurement. As regards the composition, ideally, a price index should reflect the variations in price of the commodities produced on the individual holdings assessed. Since 80 per cent of the area under cultivation in the country is under foodgrains, in most cases, the relevant index to take may be the index of prices of the main cereals of the region. Where a commercial crop predominates greatly, the price of that crop will have to be taken as the base; where both commercial and food crops are equally important, a composite index may have to be aimed at. In the large majority of instances, the price index could be based on the predominant crop of the region. Regarding the regional range of the price index, the index should be related to the entire area of the State, or where that area happens to be too large, to each of a very few regions into which the State may be divided. If prices rise by more than 25 per cent, increases in land revenue should be effected from a minimum of $3\frac{1}{8}$ per cent, *i.e.*, one-half anna in the rupee, to a maximum of $12\frac{1}{2}$ per cent (two annas in the rupee). If prices decline by more than 25 per cent, reductions in land revenue should be effected from a minimum of $6\frac{1}{4}$ per cent, *i.e.*, one anna in the rupee, to a maximum of 25 per cent (four annas in the rupee). In cases where assessment is not related to the price factor, such as when dry land is converted into irrigated land, irrigated land into dry land or land has either deteriorated or become unsuitable for cultivation through natural causes, the assessment may be fixed according to the nature of the contingencies.

(c) *Allocation of Land Revenue*

Regarding the allocation of land revenue, the Commission recommends that whether at their present levels or after standardisation and further revision, an amount of not less than 15 per cent should be allocated to the local bodies, village panchayats, etc., the apportionment being out of the revenue collected in the area of the particular local body. If an appreciable increase in land revenue results from the operation of first stan-

dardisation or subsequent revision, as much as possible of the additional revenue should be passed on to the local bodies or be utilised for the execution of local works, etc.

(d) *Administration*

The administrative aspect of land revenue refers to its collection and the machinery for collection. Land revenue is collected in cash. But it has often been suggested that collection in kind would be more beneficial to the landholders particularly to small ryots. Among the various methods of collecting land revenue in kind, the two which have been put to use are: (1) payment in kind on cash basis, where the assessment would be fixed in cash, but the payment would be made in kind at the conversion rates fixed at each harvest, (2) payment through co-operative marketing societies where the assessee would take the produce to the market and sell it through a co-operative society. The co-operative society would issue a receipt for the payment of land revenue and pay cash direct into the Government treasury. The Commission considers that, apart from other considerations, there would be many administrative difficulties in adopting the first suggestion. This would involve heavier expenditure than at present and the provision by Government of storage and transport facilities on an expensive scale. Further, payment in kind will introduce an element of uncertainty in the actual value of the receipts. The method of collecting land revenue through co-operative societies should be workable, provided efficient co-operative societies are in fact available. The proposal must remain largely theoretical until the development of co-operative marketing societies on an adequate scale.

The present administrative machinery for the collection of land revenue has been evolved through years of experience, trial and error. On the whole, it is one of the most efficient instruments of administration. The reforms usually suggested in the land revenue administration are: (1) the abolition of Boards of Revenue and the Divisional Commissioners, and (2) substitution of the present system of collecting land revenue through hereditary village officers by paid Government servants. After examining the functions of the Boards of Revenue and Divisional Commissioners, the Commission has observed that they serve as supervisory

and appellate authorities and are evidently necessary. Even if they are to be replaced, it will be necessary to establish revenue and other tribunals for appellate work as has been done in Bombay. Regarding Divisional Commissioners, they concur with the view of the Planning Commission that "there is need for senior officers to whom the new district officer can turn for advice and guidance. In the context of the implementation of the plan, it will be a distinct advantage to have an authority like the Commissioner at the regional level." The point urged in favour of an agency of Government paid servants instead of hereditary village officers (*e.g.*, *lambardars* and *patels*) is that they would be trained and be able to keep accounts and to increase generally the efficiency of collection. In fact certain States have tried the experiment of replacing hereditary village officials by paid Government servants. The available evidence reveals that in some of them instead of leading to greater efficiency, it has resulted in slackness in revenue collection. The Madras Land Revenue Reforms Committee (1950), while recommending the abolition of the hereditary system, suggested that selection of village officers should be made from among suitable and qualified persons residing in the village. If such persons are not available, selection should be made from among other suitable and qualified candidates, subject to the condition that the selected officer takes up residence in the village.

Another alternative proposal is the collection of land revenue by village panchayats which, it is claimed, will be able to deal more directly with the individual revenue-payer than of village officers acting as agents of Government department. The Commission sees no objection to this proposal wherever suitable, the panchayat getting a commission on the recoveries, but in actual fact such a course is not likely to be feasible except in a limited number of instances. They also endorse the suggestion made by the Madras Land Revenue Reforms Committee that hereditary village officers should be replaced by paid village officers selected by Government on the basis of their qualifications and condition of residence in the village.

(c) *Assessment of Non-agricultural Land*

The majority of the States have not given adequate attention to the taxation of un-earned income derived by lands put

to non-agricultural uses. The assessment of this land at rates higher than those of agricultural lands is wholly justifiable since the increase in value is generally not due to any expenditure or effort on the part of the owner, but arises because of the growth of population, the extension of towns, the introduction of railways, the provision of civic facilities and so on. Therefore, a regular system of assessment of non-agricultural lands on the lines of the system prevailing in States like Bombay is recommended.

(f) *Irrigation and Betterment Charges*

Other forms of taxation on land are the irrigation and betterment charges. The bulk of irrigation revenue is derived from water rates, water cess or occupier's rates. There is a wide variation both in the principles and in the rates of assessment of these charges. Water charges are levied on the basis of (i) volumetric rate, *i.e.*, charge according to the quantity of water delivered; (ii) consolidated rate *i.e.*, a rate which is consolidated with the land revenue and fixed on the settlement principle; (iii) differential rate, *i.e.*, a rate for water taken on dry land from Government sources of irrigation corresponding to the difference between the assessments on dry lands and wet lands; (iv) occupier's rate, *i.e.*, fixed rate on the area actually irrigated and which usually varies with the nature of crops. This system is in general operation over a great part of the country, concessional rates being provided for certain crops such as fodder crops; (v) agreement rate which is similar to the occupier's rate with the difference that the rate fixed is for a period of years by agreement whether the water is taken or not. This system has come to prevail in the deltaic regions of Orissa, West Bengal, parts of Bihar and Madhya Pradesh. In areas where water is taken on demand with special permission 'occasional' rates are charged which are considerably higher, sometimes nearly twice the agreement rates. Where canal water is utilised without proper authorization, penal rates are imposed. These systems of water charges are also applied to minor irrigation schemes. The incidence of water rates has gone down considerably in recent years emphasising the need for revision in rates.

(g) *Betterment Levy*

This is a capital charge levied with the objectives of stabilising land values and obtaining resource to liquidate at least a part of the capital cost of the irrigation projects. A system of betterment levy was in vogue in Mysore as far back as 1888. The rate varied from one-third to one-fifth of the difference between the local market value of an acre of dry land and an acre of wet land. The principle of the beneficiaries contributing to the cost of a development scheme has now been accepted and several State Governments have taken power to impose a levy for new projects. The Governments of Bombay, Hyderabad, Punjab, Pepsu and Rajasthan were among the first to enact the necessary legislation. Many States have accepted that the betterment levy should not exceed 50 per cent of the increment in value, whatever be the basis for computation of such incremental value. The Andhra and Madras States propose appropriating 50 per cent of the net increased value. On perennial lands commanded by the Bhakra project, the betterment levy amounts to nearly one-fourth of the increase in capital value.

CONCLUSION

The recent measures of reform in the land revenue assessments show that so far such reforms have been only in response to changes in land tenure, changes in the rights and obligations of the tenants and the political re-organisation following Independence. The broader objective of evolving a simplified system of land tenure and assessment which will stimulate capital formation and improve agricultural efficiency is yet to be attained. The important questions for future are the nature and extent of the contribution which agriculture must make to the resources for development and the place of land revenue in any scheme of taxation of agriculture.

CHAPTER X

SIZE OF HOLDINGS

The most important factor, next to tenures, which affects the character of farming and the returns from agriculture is the size of holdings or operating units of cultivation. India is predominantly a country of small holdings. There are, however, a few large-sized farms, but most of these are associated with plantations for tea, coffee and rubber which are in the hands mostly of foreign owners.

ESTATE FARMING

During the rule of the East India Company, attempts were made to acquire large blocks of land for the cultivation of cotton for the mills in England. But the idea was not favoured by the authorities in India on political grounds. Since the Mutiny (1857), as a protection against future risings of a similar nature, attempts were made to settle retired British civil and military officers on tea, coffee and rubber estates in the Himalayas and the Nilgiris. Special concessions were given to them to acquire land and advances were granted in the shape of seeds.¹ This led to the creation of a number of estate farms or plantations. Later on, Indians also took advantage of these openings and acquired some lands.

On the plains where irrigation facilities were extended, as in the Punjab and U.P., large blocks of land were given to both Indian and European colonies and some of these farms are still in operation. In some cases, wastelands were acquired and estates built up, such as Sir Daniel Hamilton's Estate in the Sunderbans and entirely new colonies were created at a considerable cost. The Government of Bombay adopted a new procedure when the waters from the Nira canal were not used by the cultivators in the territory and the projects were failing. They ac-

¹ Thompson and Garra: *Rise and Fulfilment of British Rule in India*, 1935, p. 474.

quired about 6,000 acres of land and leased the same to a sugar syndicate. Since the grant of protection to the sugar industry, some eight or nine cane farms with factories were established. They purchased or took on lease large blocks of land for sugar cultivation by modern capitalistic methods. Fruit farming has also come into vogue and large blocks of land have been acquired for experiment in large-scale farming. Most of these farms have been acquired by persons with capital resources, who are in a position to make use of scientific methods in cultivation, apply manures and introduce new varieties of crops and machinery. There is no reliable source of information regarding estate farming in India, the number of such farms, their sizes, method of work and the results to the owners as well as to their tenants and wage-labourers.

The available information on the subject shows that there are two main categories of these estates : (1) Estates owned and operated by individuals or a syndicate or a joint-stock company. On these, hired local labour is employed for all operations, and expert engineers, agricultural graduates and trained supervisors are employed in the superior functions of management. Modern machinery and chemical fertilisers are utilised extensively. The owner or the manager usually lives on the estate and supervises the operations. This type is represented by the Deccan sugar estates and the estates on the hills. (2) Estates owned by a single person or a corporation where lands are parcelled out to permanent or semi-permanent tenants, who are given every facility to improve their position. Housing accommodation, improved seeds and manures and facilities for the processing and the marketing of produce are provided. They are also given the benefit of services in the shape of education and health. Sir Daniel Hamilton's Estate in Gosaba is an excellent example for this type of estate farming.

There can be little doubt that large-scale capitalist farming must give, on the whole, better results than can be obtained by small, ill-equipped farmers working on tiny and scattered plots. As the estates use the best available scientific methods, the production capacity is definitely higher. They are also able to afford fairly good social services for the labouring population. Where

the tenancy system is in operation, the tenant is afforded excellent facilities for the marketing of his produce. He is, on the whole, in a better position economically than the ordinary farmers working on their own, in spite of the practice of crop-sharing followed by some. On the other hand, experience has also shown that the yields in the estates are not better than can be obtained by the best owner cultivators in the locality. An economic holder, well qualified by tradition and practice, can get at least as good a yield on his lands as these estates, though it must be admitted that such cases would be hardly a few in any locality from the point of view of the national dividend. Therefore, estate farming would seem to be pre-eminently better and the tenant under this system would be better off than under individual farming, especially as he gets a compact economic plot of land to work on. It would, however, be an error to conclude that universalization of estate farming would be the right solution of the problem of the economic utilisation of our land resources. To say the least, it is doubtful if, in the long run, it would serve the best interests of the cultivator.

The question has sociological as well as economic implications. By the application of science and capital, the land yields can be doubled or trebled; but there are also possibilities of capitalistic exploitation, if estate farming is carried on solely for profit. This has been the case in plantations, and Government had to pass legislation in order to check the exploitation of labour. Probably, excellent results can be achieved where an estate is worked on a co-operative or profit-sharing basis, and the object of the State or the estate owner is to guide and help the operations on the farm so as to set a valuable example. The estate of Mr. Elmhirst in Devon in England is an instance in point. There the tenants share in the profits and are provided with decent wages and other social amenities. The estate of Mr. Ford in England extending over 3,000 acres is another instance of a project undertaken to prove that large-scale production is possible and desirable in agriculture both from the point of view of total yields and the welfare of the farm tenant or labourer. The main problem is one of equitable distribution. In the evolution of farms of economic size in India, it is also necessary to see that the undesirable features of modern capitalism are not reproduced. Possibly in the reclaimed areas, estate farming with suitable safeguards may be

found useful. But as a general method of land utilisation, this form of organisation has little scope under existing conditions.

The reorganisation of the agrarian base to create large-sized farms would raise the fundamental problem of absorbing the large number of small holders who would thereby be thrown out of employment. The problem of finding suitable outlets for the existing surplus population on land is serious enough, so that even the constitution of fair-sized economic holdings under the reforms presents a serious enough problem. To some extent, it is true that the workers thus released could be employed more remuneratively on the farm itself inasmuch as the application of science and capital would mean more production and, therefore, more employment. The recent trend towards a rationalisation of production processes sets up, however, a tendency towards employment of fewer and fewer labour. This is really the old question : to what extent labour and capital are complementary and to what extent they are competitive. Without a more detailed inquiry and a wider experience, it is difficult to say, whether the one or the other tendency would predominate. If most of the processing of agricultural produce is done on the farm itself, and if by-products are used for suitable manufactures on the spot, as is done at Walchandnagar and at Ravalgaon, this problem of re-employing the small holders can be considerably alleviated. The proper combination of agriculture and industry in this manner offers a promising line of solution, for, on the one hand, it may enable the capitalists to offset the profits and losses from either and may offer greater continuity and security of employment to the workers.

Even then, the main difficulty in the way of any greater extension of estate farming would be to find men with the vision, enterprise and capital resources so necessary for such undertakings. The combination of agriculture and industry in a suitable manner without creating problems of labour displacement and discontent, is no easy task. These enterprises would have to justify themselves not merely in terms of larger profits through efficient management but in terms of employment, better wages, improved conditions of work and living, and more efficient social services than are ordinarily available to the rural population.

SMALL HOLDINGS*Sub-Division and Fragmentation*

Small holdings are the characteristic feature of the Indian agricultural organisation. In this chapter, the concern is more with the measures that have been adopted and the measures that are necessary to counteract the evils of the system. One of the causes responsible for making agriculture an unprofitable industry in India is the sub-division and fragmentation of holdings. The pressure of population on the soil and the operation of the Hindu and Mohammedan laws of inheritance have resulted in the splitting up of a large portion of cultivated land into holdings which fail to conform to any reasonable economic standard. The problem has two distinct aspects. The holdings not only tend to become small, but the individual holdings tend to become broken up (fragmented) into a number of plots, often scattered over different parts of the village. Sub-division of land occurs as a result of the sharing of ancestral landed property among the successors usually in accordance with the laws of inheritance. This process of sub-division may be further complicated by voluntary transfers, by sale, gift or otherwise. Fragmentation refers to the manner in which the land is held by an individual or undivided family. It consists of the splitting up of one holding into a number of separate plots separated by land in the possession of others.² This is due to the custom under the laws of inheritance of partitioning land equally between the heirs. The partitioning does not involve merely quantitative splitting up, but the land should be so split up as to equalise the qualitative differentials in the soil, *i.e.*, since land is of different degrees of fertility, each heir should get an equal area of fertile land. This results that each sub-plot is ultimately a long narrow strip. The lands situated near the village-site assume greater importance than those at a distance.

Previous to the current land reforms, there were two types of landholders, (i) those who possessed some permanent hereditary

² A study by the F. A. O. of the United Nations defines fragmentation as a stage in the evolution of the agricultural holding, in which a single farm consists of numerous discrete parcels, often scattered over a wide area. This phenomenon occurs in most parts of the world where cultivation is long established. Nor is it peculiar to any particular form of land tenure. It has been usually associated with congestion of rural population and laws of inheritance which prescribe distribution of property among surviving relatives according to a fixed share. See the Consolidation of Fragmented Agricultural Holdings, F. A. O., 1950.

right in land, and (ii) those who had no such right, but who held from generation to generation and even followed the laws of inheritance in the division of a tenancy on the death of the holder. Many right holders did not cultivate at all and many more cultivated only part of their land and rented out the remaining portion to tenants-at-will. The result of this state of affairs is that subdivided or scattered holdings are more pronounced among the cultivators than among right holders.

Extent of Growth

The number of cultivated acres per farmer and the average size of the holdings in some of the States are indicated in Table 1.³

TABLE I
NUMBER OF CULTIVATED ACRES PER FARMER, AND THE AVERAGE
SIZE OF HOLDINGS IN INDIA

State	1931*		1950-51	
	Number of cultivated acres per farmer	Average size of holdings in acres	Number of cultivated acres per farmer†	Average size of holdings in acres‡
Bombay	16.8	11.7	9.7	10.4
Madhya Pradesh (C.P.)	12.03	8.5	13.9	11.6
Punjab	8.8	7.2	11.8	10.0 (a)
Madras	5.99	4.5	4.5	3.8
Bengal	3.97	2.4	4.7 (b)	4.4 (a)
Assam	3.4	Above 2	5.3	4.9
U.P.	3.3	6.0	5.3	3.3
Bihar	2.96	Between 4 and 5	4.1	Not available
Orissa	2.96	Between 4 and 5	5.6	4.9 (c)

* Report of the Agrarian Reforms Committee, Hyderabad-Deccan, Government of Hyderabad, 1949, p. 64.

† B. Ramamurti: *Agricultural Labour—How They Work and Live*, 1954, Part B Tables.

‡ Compiled from the Report on the First Five-Year Plan, Government of India, 1952, pp. 199-200.

(a) Report of the Rural Banking Enquiry Committee, 1950, Para. 30.

(b) West Bengal.

(c) Report of the Land Revenue and Land Tenure Committee, 1949, Appendix IX.

³ It is difficult to have a statistical comparison of the position in regard to the size of holdings in different States, as the recent political as well as administrative changes have resulted in the re-composition of the area of the States which affect both the per capita calculation of the acreage as well as the size of the holdings. However, for purposes of a general indication of the trend in the growth of sub-division, the statistics for 1931 are also given with the above table.

The conditions existing among permanent right holders are reflected in the figures given for 1931. The position is aggravated by the fact that many of the smallest cultivators are really in the position of allotment holders cultivating tiny fields to eke out a bare existence. A complete survey regarding the size of holdings in different States is not available. But certain *ad hoc* surveys conducted by non-official institutions in the different States give some idea of the extent of sub-division and fragmentation in India. In the Punjab, the number of holdings below 3 acres increased from 43·4 per cent of the total holdings in 1928 to 48·8 per cent in 1939. Recent enquiries showed that almost 60 per cent of the holdings were below 5 acres while holdings below 15 acres constituted 88 per cent of the total number of holdings.⁴ In Madras, the *Pattas* paying Rs. 10 and less increased from 69·5 per cent in 1925 to 87·65 per cent in 1945.⁵ In Bombay, the average holding shrunk from 40 acres in 1871 to 7 acres by 1914-15. In Hyderabad, the average size of holdings decreased from 23 acres in 1880 to 14 acres in 1945-46.⁶ In the other States also, the trend in the distribution of holdings according to size showed that a very large percentage of holdings is below five acres. The results of the Agricultural Labour Enquiry conducted in 1950-51 in certain villages in the States of Madras, Bihar and West Bengal showed that the largest percentage of holdings is below 2 acres.

The data on the size of holdings do not reveal the extent of fragmentation in individual units. Several authorities like Dr. Mann, Keatinge, Darling and Calvert who undertook studies in various parts of the country were alarmed at the extent to which fragmentation of holdings had gone and the harm it caused to agriculture. On the basis of information collected by Captain S. P. Mohite, the number of holdings in Bombay State increased from 12,72,102, in 1904-05 to 22,92,415 in 1943-44.⁷ In the course of the discussions on the Prevention of Fragmentation and Consolidation of Holdings Bill (1947), it was stated in Bombay that records of Satara and Ratnagiri districts are more eloquent testimony to the devastating effects of sub-division of land. In one case,

4 Information collected by the Department of Research and Statistics, Reserve Bank of India, published in Consolidation of Holdings, 1951.

5 Final Report of the Famine Enquiry Commission, Bengal, 1945, p. 256.

6 Agricultural Legislation in India—Volume II, Consolidation of Holdings, 1950.

7 Co-operative Farming in Bombay Province, 1947.

25 acres of land were sub-divided into 125 individual holdings, while in another case 19 acres were owned by 126 different farmers.

In 1928, the position in the Punjab was really depressing. A special enquiry into 2,397 villages revealed that 17·9 per cent of the owner's holdings were under one acre, a further 25·5 per cent were between one and three acres ; 14·9 per cent between three and five acres and a further 19 per cent between five and ten acres.⁸ In the Chhachh "the land is often divided into strips which are sometimes half a mile long and only twenty or thirty yards wide and each strip has a large number of holders."⁹ Subsequent enquiries showed that in a Punjab village, lands were divided into 1,898 fields averaging one-fifth of an acre and 2,890 holdings have each over three fields. In another village, 12,800 acres were found to be scattered in 63,000 fields.¹⁰ The average size of plot in some districts of Bihar was found to vary between 0·28 acres and 0·81 acres at the last settlement. In the Chattisgarh division of Madhya Pradesh, it was common to find an average holding of 10 to 12 acres scattered all over the village in no less than 30 to 40 plots of land.¹¹ In Bengal, 46 per cent of the families had less than 2 acres ; 11·2 per cent possessed between 2 and 3 acres ; 9·4 per cent between 3 and 4 acres ; 17 per cent between 5 and 10 acres ; 8·4 per cent about an acre.¹² In the U.P., the majority of the holdings of the tenants were below the economic size according to the Provincial Banking Enquiry Committee Report. Dr. Mann found that in one Deccan village, 156 owners had between them no less than 718 separate plots of which 423 plots were less than one acre and 212 plots were less than half an acre.¹³ In 1936-37, over 2 per cent of the landholders in Bombay had holdings below 15 acres. But the aggregate area held was only 28 per cent of the total occupied area of the then Province.¹⁴ In Bombay and Assam, on an average, every holding contains 3·3 and 4·5 plots. In Ajmer, the number of plots vary from 3·3 to 3·5. In

⁸ Report of the Royal Commission on Agriculture, p. 132.

⁹ M. L. Darling : *The Punjab Peasant in Prosperity and Debt*, 1925, p. 84.

¹⁰ Survey of Bairampur Village, The Board of Economic Enquiry, Punjab, 1922.

¹¹ Manual of Instructions on Consolidation of Holdings in the Central Provinces (1946).

¹² Report of the Land Revenue Commission, Bengal, Vol. II, 1940, pp. 114-15.

¹³ Dr. Mann: *Land and Labour in A Deccan Village*, 1917, p. 48.

¹⁴ Land Revenue Administration Report, Bombay Province, 1936-37, p. 122.

Madras, fragmentation had not proceeded as far as elsewhere, probably because the joint family system survived to a greater extent than in any other province. The re-survey of some South Indian villages (1940) revealed a deterioration in this respect. In one village, for instance, it was found that 170 ryots had 1,027 separate plots (1,658·10 acres) scattered in different places in five revenue divisions, each holding averaging 6 plots—a real difficulty for the cultivators.¹⁵ On the whole, the evil is so widespread that the State Governments reported to the Famine Commission in 1945 that there is a tendency in all Provinces “to a progressive increase in the fragmentation of holdings.”¹⁶

The above illustrations do not present a complete picture of the position in the whole of India in regard to either sub-division or fragmentation. But they give a sufficient indication that the problem has assumed serious proportions.

Evils of Sub-Division and Fragmentation

The evil consequences of excessive sub-division and fragmentation of land are¹⁷ :

1. They impede current cultivation and waste time.
2. They come in the way of permanent improvements of the land.
3. They handicap the cultivator from living on his farm.
4. They make any orderly organisation of labour or capital difficult.
5. They frequently result in second crops not being grown.
6. They sometimes throw land out of cultivation altogether.
7. They cause enmity amongst neighbours leading to litigation and permanent feuds.
8. They produce a generally uneconomic situation.

As each generation enters into its patrimony, the extent of land that goes to the share of each heir diminishes, with the result that there is no steady and orderly development of the land.

¹⁵ Thomas and Ramakrishnan: *Some South Indian Villages, A Re-survey, 1940*, p. 340.

¹⁶ Final Report of the Famine Enquiry Commission, Bengal, p. 264.

¹⁷ Keatinge: *Agricultural Progress in Western India*, p. 71. Also see the Consolidation of Fragmented Agricultural Holdings, F. A. O. (1950).

CASE FOR CONSOLIDATION

The common remedial measure suggested for fragmentation is consolidation of holdings, which consists of a substitution by an exchange of land in compact blocks in place of isolated strips of land. This method of consolidation was advocated as far back as 1880 by Sir Charles Cilliot and Sir Edward Buck. In 1908, Mr. Shearer explained the Japanese method of dealing with the question of the fragmentation of holdings.¹⁸ It was in 1912 that Raja Pyari Mohan Mukerjee drew public attention, for the first time, of the evil of hiring plots and fragmented holdings. At the same time, G. Keatinge in his book 'Rural Economy in the Bombay Deccan' examined the characteristics of economic holdings and the evils of sub-division and fragmentation. The Report on Agricultural Indebtedness in the Baroda State, 1913, suggested that consolidation of small and scattered holdings should be undertaken as a measure of primary importance for the improvement of agriculture.¹⁹ In 1915, Sir Bryce Burt, in a paper which he read before the Science Congress, pointed out that in other countries, legislation had been introduced for re-alignment of holdings with a view to the economical and efficient cultivation of land. But he feared that "the advocate of re-stripping is looked upon as an impatient idealist whose methodical soul is vexed by the present irregular boundaries." In 1916, in the Bombay Legislative Council, a resolution was moved for checking minute sub-division of agricultural lands which was taking place in different parts of the Province. The motion was, however, lost, as the majority considered it impracticable to alter the Law of Partition. In 1917, the All-India Board of Agriculture drew the attention of the Local Governments to the problem of fragmentation and recommended close investigation of the problem in consultation with the Registrars of Co-operative Societies with a view to adopting necessary remedial measures to suit local conditions. The Royal Commission on Agriculture emphasised that consolidation of holdings into compact blocks was the only process by which relief for the evils of fragmentation was possible.²⁰

¹⁸ *Agricultural Journal of India*, January, 1908.

¹⁹ The Enquiry was conducted by Shri Manilal B. Nanavati, then Registrar of Co-operative Societies, Baroda.

²⁰ *Vide* Report, p. 138.

Measures for Consolidation

The legislative measures adopted to effect consolidation of fragmented holdings and to prevent the recurrence of the phenomenon concern themselves with two aspects of the problem : (i) the methods adopted for attaining the objectives, and (ii) the extent of the problem which the legislation seeks to cover. The methods adopted are either permissive in character, relying mostly on the initiative of the persons of the locality, either as owners, permanent holders, cultivators, etc., or they are compulsory, the procedure for the purpose emanating from the local government. The first group of measures may also contain a very limited degree of compulsion which, however, is generally confined to overcoming the obduracy of any small minority seeking to obstruct the application of the measure. The acts are also either confined to the consolidation of existing holdings, leaving untouched the possibilities of further fragmentation in future, or they are more comprehensive in scope. Although consolidation of holdings as a method of combating the evils of fragmentation has been mooted in different States, it is only in the Punjab, Madhya Pradesh, Uttar Pradesh and the former Baroda State that practical measures have been adopted from the beginning.

Bombay

The Bombay Prevention of Fragmentation and Consolidation of Holdings Act of 1947 came into effect on April 8, 1948. The Act enabled the Government to frame schemes of consolidation of holdings in any area on its own initiative. A Special Superintendent of land records and consolidation of holdings was appointed. Training was given to consolidation officers and assistant consolidation officers. Exploratory work on consolidation was started unofficially and 186 villages in eight districts were selected as concentrated areas for the implementation of the Act in the first instance, and of these, tentative schemes were prepared for 61 villages. The Bombay Government hoped to complete the work under the Act in more than 22,000 villages of the old Bombay Province within 14 years from April 1, 1950, by tackling an average of 1,500 villages each year. Under the Act, the standard minimum areas of land for various classes have been fixed.

The former Baroda State was the pioneer in initiating legislation for consolidation. The Report on Agricultural Indebtedness in Baroda made the following proposals :—(i) granting of facilities for voluntary exchanges of fields with a view to consolidation ; (ii) the enactment of permissive legislation empowering Government to undertake redistribution of land, wherever people are willing ; (iii) the fixation of the lowest limit below which partition of agricultural land should not be recognised. These proposals were subsequently incorporated in a legislation. As a result, the limit of sub-division of holdings was raised from $1\frac{1}{2}$ *bighas* of '*jirayat*' and half a *bigha* for '*bagayat*' or '*kyari*' land to 8 *bighas* for '*jirayat*', 3 for '*bagayat*' and $1\frac{1}{2}$ for '*kyari*' lands. Secondly, under the Consolidation of Agricultural Holdings Act (1920), on the application of two-thirds of the '*khatedars*' of a village holding not less than half of the cultivated area, a scheme of consolidation was to be prepared, taking care to see that the new holdings were as far as possible equal in area and value to the old holdings, and providing for independent access to each field. Differences, if any, in the value of the original and the new holdings would be settled by cash payment, and the legal burdens transferred to the new holders. Further, by an Act of 1933, on the occasion of the sale of any land below the minimum limit of a holding, the right of purchase was given to the holders of the neighbouring fields. In spite of these legislative measures, it was reported that the results achieved were not satisfactory. From August, 1935, to March 1938, only 1,518 survey numbers with an area of 6,200 *bighas* were consolidated into 435 survey numbers. The poor results were attributed to want of suitable staff, and the Act being persuasive and not compulsory. In addition to consolidation by legislative measures, voluntary exchanges through the formation of co-operative societies were encouraged. By this process, between 1926 and 1937, 1,336 members of 74 societies consolidated 11,427 blocks measuring 50,407 *bighas* with 10,188 blocks. The hindrances to consolidation through co-operative societies were : (a) indebtedness on a large scale ; (b) lethargic attitude of the people ; (c) sentimental attachment to land ; (d) want of adequate areas of the same kind of land for exchange ; (e) lack of adequate and persistent propaganda and (f) lack of efficient staff to carry out the legislative measures. Later, the restrictions on the minimum size of plots were removed and the law of pre-emption abolished.

Punjab

Attempts at consolidation of holdings were more successful in the pre-partition Punjab than anywhere else due mostly to the homogeneity of the soil, the simple system of land tenure, and more particularly, the realisation on the part of all concerned that fragmentation had reached very uneconomical limits. The consolidation was carried out through the medium of co-operative societies. The first society was organised in 1920. The owners of land who desired consolidation of their holdings formed themselves into a society, pooled their holdings and prepared a scheme of re-alignment which must be accepted by at least two-thirds of the members. In the earlier period, Mr. Calvert devised a scheme which gave some concessions to the peasants' suspicion; the members were required to accept the new consolidated holdings only for four years with the right to revert to their scattered plots, if they so wished. As no approved re-allotment was rejected, the time limit was later withdrawn. For registration of a society, at least 90 per cent of the owners of land in a village had to join in the application, and offer for re-partition at least 75 per cent of the village lands. As far as possible, each owner was allotted as many compact blocks of land corresponding to the type of land held by him before consolidation and equal in value. Where land was situated on different levels or was of different quality, provision was made to allot more than one block to each member. Access to each member's holding was given by laying out new roads, the space for which was found by the removal of superfluous boundaries dividing the tiny plots. Special sites were also often assigned by the village for a school, play ground or similar amenities. Care was taken to see that no right holder was eliminated however tiny his holding may be.²¹

It goes to the credit of the Province that, with suitable staff sanctioned by the Government, more than a million acres out of a cultivated area of 30 million acres were consolidated. The consolidation was followed by an increase in the area under irrigation and extension of area under cultivation. It simplified Government's work of maintaining village records, and led to an increase in land revenue. The Punjab Consolidation of Holdings Act,

²¹ Consolidation of Holdings, Reserve Bank of India, 1961, p. 15.

1936, removed the legal and other difficulties revealed in the process of consolidation work. Though the work was to be carried out through the Revenue Department, the major share of the work was done by the Co-operative Department. The Act enables two or more landowners holding a certain minimum area to apply for consolidation to an officer appointed by the Government. Consolidation is undertaken if two-thirds of owners holding not less than three-fourths of the cultivated area agree to do so. By September, 1939, the operation of the Act was extended to seven districts. Up to the end of 1945-46, an area of 16,51,511 acres of land or about 5 per cent of the cultivable area (before partition) was consolidated. The Government actively participated in the work and bore the cost of staff required for the purpose.

After partition, the consolidation of holdings was carried on under the East Punjab Holdings (Consolidation and Prevention of Fragmentation) Act of 1948. A new department has been set up which does the work hitherto done by the Co-operative Department. Seventy villages comprising 42,300 acres of land were tackled on a trial basis. On 1st April, 1950, the programme of work started with 450 sub-inspectors who were expected to finish consolidation operations for 1,80,000 acres of lands yearly at the rough estimate of 400 acres a year by one sub-inspector. The entire scheme was to be completed by 1956.

It is claimed that consolidation of holdings enabled reclamation of waste lands, made possible more work of irrigation such as sinking of wells and adoption of improved methods of farming. Initially, the entire cost of consolidation was borne by Government; later a part of the cost was recovered from the societies by a levy. Prior to 1939, the cost of consolidation in the Punjab varied from Rs. 1-8-0 to Rs. 2-8-0 per acre. In 1947, the cost had increased to Rs. 15 per acre. The Act has been amended further in 1956 to prevent the reversion to the previous holding in case of re-partition of an agricultural holding.

Uttar Pradesh

In the Uttar Pradesh, the work of consolidation of holdings was experimented through the agency of co-operative societies, the expenses being borne partly by Government and partly by the co-

operative union. The land of the members is pooled together, re-aligned by an Executive Committee and approved by two-thirds majority of the members. In about 13 years, 67,000 *bighas* of land split up into 75,965 plots were consolidated into 7,599 plots. The cost of these operations worked out to about eleven annas per acre. The slow progress made in the State was attributed to heterogeneity of soil, but more particularly to complexity of tenures, want of trained staff and paucity of funds. As an experimental measure, under Section 6 of the U.P. Consolidation of Holdings Act of 1939, the scheme was tried in 6 districts of the State. The scheme was also tried in Gorakhpur, *ad hoc* panchayats being elected by the villagers themselves. But the experiment in either case did not prove successful. The reasons for the unsatisfactory results are the inaccuracy of the village records, the lack of properly trained staff for the work and the great variety of land tenures. It was therefore decided to hold the Act in abeyance until the implementation of the U.P. Zamindari Abolition and Land Reforms Act, 1950. At the end of 1948-49, there were 427 societies for consolidation of holdings. The area consolidated up to the period covered 1,70,000 acres. The Act is amended further to provide for compensation to tenure holders whose lands are used for public purposes under the consolidation programme to effect partition of joint holdings and to authorise a scheme of consolidation including more than one village.

Madhya Pradesh

The Madhya Pradesh initiated consolidation by passing the Consolidation of Holdings Act, 1928, and applying it to Chattishgarh division.²² When one-half of the villagers holding two-thirds of the land desires consolidation, a special officer prepares a scheme with the assistance of a 'panchayat' and the scheme is submitted to the Settlement Commissioner for confirmation. Up to 1937, the holdings of nearly a lakh of permanent holders covering an area of about 1,133,000 acres and split up into 2,433,000 fragments were consolidated into 3,61,000 compact blocks. From December, 1928, to September, 1950, the area of land consolidated came to 24,18,851 acres; the number of blocks was reduced from 48,93,437 to 8,98,762. The cost of consolidation rose

²² *Chakbandi* is the term commonly used to denote the operations.

from four annas per acre in 1942, to six annas in 1949, and twelve annas since November, 1950. The legislation in Madhya Pradesh has been applied very cautiously, and is largely permissive in character. The initiative is being left to the people. The Act was extended to the Saugar district in 1948 and in 1949-50, the work was extended to the Hoshangabad district with the purpose of consolidating lands ploughed under the Tractor Ploughing Scheme. In all, 2,633 villages have been successfully consolidated involving about 23.5 lakh acres. The Act may not prove so successful in the cotton growing tracts of Berar where the holdings are fairly large, and where the "soil and position" factors will make it difficult to persuade the cultivators to agree to an exchange of plot.

Kashmir

In Kashmir, up to 1935-36, some 36,047 acres of land were consolidated in 189 villages, reducing the number of blocks from 85,576 to 11,498. During 1937-47, 11,758 acres of land were consolidated, and the number of blocks were reduced from 24,900 to 4,132.

As an overall review of the progress in consolidation work, the position upto 1955-56 was that in Bombay, 2.1 million acres were consolidated, in Madhya Pradesh 2.9 million acres, in Punjab 6.1 million acres and in Uttar Pradesh 4.4 million acres.

The old Baroda Acts and the Consolidation of Holdings Acts passed in the Madhya Pradesh and Uttar Pradesh in 1928 and 1939 respectively are of a restrictive and limited nature. The Bombay, the East Punjab and the Hyderabad Acts belong to a class of legislation which is more comprehensive in its scope and obligatory in its application. However, both these types of legislation do not directly provide for the creation of economic holdings but only for making existing holdings more compact. The Bombay, Punjab and the Hyderabad Acts provide for the laying down of standard areas in notified localities which could be cultivated profitably as separate plots and the prohibition of sub-dividing land in such areas below the minimum standard. The Acts are expected eventually to result in the creation of holdings of more economic size by declaring holdings below the standard area as fragments, prohibiting the transfer or partition

of land in notified areas so as to create fragments and giving the right of pre-emption to owners of contiguous plots in case of sale of such fragments.

CONSOLIDATION IN OTHER COUNTRIES

In other countries, causes similar to those referred to above have led to sub-division and fragmentation of land. To remedy these evils, attempts have been made to create and to maintain reasonably sized and reasonably situated economic holdings for peasant farmers through drastic legislation. The legislation has the features of (a) compulsory expropriation, (b) compulsion on all concerned to accept restripment when a certain fraction of land-holders desire it, (c) subsequent indivisibility of reconstituted holding, (d) exemption of the reconstituted holdings from seizure for debt and (e) not allowing the reconstituted holding to be combined with other holdings. As a result of such remedial measures, the value of land is said to have trebled in some cases and to have increased over 60 per cent in others. The general consensus of opinion is that yields of crops have increased, while cost of production has been reduced.

Various measures have been taken in other countries for combating the evils of fragmentation. In Pakistan, the basic pre-condition to combat the evil is the creation of economic holdings, particularly in the Punjab, North West Frontier Province and East Bengal. In Japan, measures for promoting the consolidation of fragmented holdings had been felt as an urgent question for many years before the land reform. No direct measures were, however, carried out until 1950. But, under the Land Improvement Law of 1949, energetic steps have been taken based on the initiative of the farmers concerned or of agricultural agencies and co-operatives. As a first step, the target for consolidation for the period 1950-57 has been set at 1,715,000 hectares, approximately 30 per cent of the total area of farm land. From 1952 to 1954, an area of 6,59,000 hectares comprising about 9,36,000 farms was consolidated. The problem in Japan is not one of grouping all plots into one unit but arranging them in such a way as to give the best possible use of agricultural land in the whole area, and to bring combination of land from the point of view of the individual farmer. Thus, the holdings scattered into 14

or 15 fragments per family, on an average, are being consolidated into 4 or 5 parcels. No action has been taken to prevent further sub-division. In China, co-operative methods are preferred in consolidating small fragmented holdings. In the Middle East, progress in combination of fragmented holdings is reported by the Government of Jordan. In Egypt, the Agrarian Reform Law of 1952 guards against the fragmentation of holdings on land which has been redistributed.

Among West European countries, there has been considerable progress in France in the field of consolidation. By a decree in 1954, the Village Commissions are entrusted with reallocation of land with a view to creating more efficient units. The area of operation of the Commission sometimes extended beyond the village borders if a consolidation of farm land located in one community with land in adjoining one would substantially improve the project under consideration. Since 1945, 2,237 schemes which involved construction of roads and digging of drainage or irrigation canals were carried out, affecting 1.6 million hectares, and another 989 schemes encompassing 700,000 hectares are in progress. In addition, 1,654 villages have requested consolidation programmes affecting an area of 1.3 million hectares.

In Western Germany, by the Land Consolidation Act of 1955, large properties can be subdivided and small properties consolidated to effect a more economic management. However, experience has shown that voluntary arrangements are not generally successful and Government action is required to reconcile conflicting interests. During 1952-54, more than 500,000 hectares were consolidated and the area of holdings to be consolidated in 1955 was expected to exceed 200,000 hectares.

In the Netherlands, consolidation of farms which are excessively small, is promoted by the Agricultural Extension Service on a voluntary basis. By a new law passed in 1954 which supplements the Land Consolidation Act of 1938, State aid is provided for reclamation work, etc. A local commission in charge of carrying out each consolidated scheme is set up by the provincial administration. In general, the Netherlands Government subsidised the investment involved in the consolidation operation upto 75% of the cost. Since 1924, 81,000 hectares of land have been

allocated, of which 25,000 hectares were reallocated during 1952-54.²³ Among other European countries, particularly in Denmark, Switzerland and Belgium, the emphasis has also been on voluntary consolidation, though a certain measure of Government intervention has been found necessary initially.

POSITION AND PROBLEMS

The review of the position on the size of holdings in India and the fragmentation of it along with the legislative steps that have aimed at correcting this defect show that one of the heaviest handicaps for economic cultivation in India is still the twin problems of sub-division and fragmentation. The tendency is susceptible of being aggravated with the growth in population and the progressive pressure of population on agriculture in the absence of alternative avenues of occupation. So far, measures for consolidation have been taken in Bombay, Punjab, Uttar Pradesh, Madhya Pradesh, Delhi, Orissa, Rajasthan, West Bengal, Bihar and Hyderabad, but the results achieved are not satisfactory except perhaps in the Punjab and Madhya Pradesh. What is surprising is that in some States, official opinion seems to be definitely lukewarm about consolidation. It is clear that the matter cannot be allowed to drift on as in the past. The ultimate solution of the question is the creation of economic holdings. What should be this economic holding may be a matter for determination on the basis of local factors prevailing in different parts of India. But the broad basic purpose and objectives can be defined, which can give guidance to the definition of an economic holding. Though the definition in point of quantitative expression may not be the same in all the States, the principle on which this quantitative expression is worked out can be uniform. The factors of the quality of the soil, rainfall, the kind of crops to be raised, the quality of labour and equipment to be used on the land can be the basis. While it is not possible to be dogmatic as to the impact of these forces at different periods of time and in different areas, it should be possible to constitute an economic holding in the sense of a holding which would ensure the best possible results under given conditions of technique, taking into consideration all the factors referred to. On this basis even, there is little doubt that an economic holding would be much larger than

23 United Nations : *Progress in Land Reform, Second Report, 1956*, pp. 75-79.

most of the holdings of the present. An attempt to create such holdings would involve displacement of labour, and this can be recommended only when there are alternative avenues of employment for such labour. This aspect of the problem deserves careful consideration in any long-range scheme of agricultural planning.

Broadly speaking, the fundamental question is one of optimum size to be determined on a balance of advantages and disadvantages of large-scale and small-scale farming. As a first step, it should be the aim to create holdings which are at least large enough to enable the peasant and his family to subsist on a standard of income which would meet the bare necessities of life and provide a margin for the necessary provisions of comfort and social security. It may thus be pointed out that the problem of countering subdivision is thus different from that of fragmentation. What has been attempted through legislation is only a preliminary step to minimise the evils of fragmentation. The wider problem can be solved by consolidation through co-operative societies, voluntary effort and education, propaganda and also, in the last resort, by judicious compulsion.

The recent reform measures pertaining to land tenures contain provisions for the determination of the size of economic holdings. But such provisions have been incorporated only in certain States. Even in those States, this provision is not aimed at preventing sub-division, and even in respect of the constitution of economic holdings, the criteria has not been the economic efficiency. The primary criteria in determining the holding has been social equity, *i.e.*, a preference has been given to the settlement, as much as possible, of the landless population on the land by this process of re-distribution. Naturally therefore, the size of an economic unit will be determined, in any given area, by the number of people requiring to be settled on the area released by State acquisition under the reforms. The problem of sub-division, therefore, is a very comprehensive one and raises issues regarding surplus population and rural unemployment, and it cannot be solved without an overhaul reconstruction programme affecting the land system as a whole and the re-adjustment of the economy on a more balanced and integrated basis.

CO-OPERATIVE FARMING

The problems under the structural deficiencies of agriculture in India, *viz.*, the small size of holdings and the fragmentation of the latter into tiny plots, consequent on the growing pressure of population emphasise the need for two major reforms. The first is for correcting the basic defects. The second is for fundamentally changing the structural pattern so that continuous technical progress which has come to play a determining role in the future development and efficiency of agriculture may be made possible. In this context, the adoption of co-operative farming is recognised as the only appropriate organisational pattern under which efficiency in agriculture under natural conditions of small size of holdings can be improved. The distinguishing feature of co-operative farming is the 'joint use of land', in the strict sense of the term, though a combination of certain forms of co-operative services with 'individual use of land' is denoted by this term.

The problem of co-operative farming raises the main issue of the relation between co-operative organisation in production and size and efficiency in agriculture. The anticipated advantages of co-operative farming are said to derive from (i) the increase in the size of the operating unit under cultivation and therefore, of the possible gains from the large scale farming operations; (ii) the possibility of technical progress through the adoption of heavy machinery; and (iii) the possibility of increase in total production. An important aspect of technical progress is no doubt that of mechanisation or the adoption of heavy machinery like the tractor or combine for improving the efficiency in agriculture. The experience of Japan and some of the countries in the Continent shows that very intensive and improved forms of cultivation are not determined by a high degree of mechanisation. In these countries the holdings are small but it has been possible to adopt mechanical means to suit the natural agrarian structure instead of adapting the agrarian structure to the requirements of heavy machinery, as under collectivisation in Russia. Thus an agrarian structure with prevailing small holdings does not exclude technical progress and improved cultural practices. Only the pre-condition is that the characteristic process of sub-division and fragmentation of holdings should be arrested.

The assumption that co-operative farming under conditions of small holdings would automatically result in an increase of agricultural production is based on a general theory that large farms are more productive than small holdings. Here, the main point for consideration is that whether under conditions of rural over-population and continuously growing pressure on land, the output per acre is not more important than the output per man. Experience again shows that the highest average output per acre is found in countries like Netherlands, Belgium and Japan with prevailing small holdings. It is not conclusively proved as yet that high yields per acre are a distinguishing feature of only large farms. High productivity per acre is not dependent on the size of the farm but on the farming techniques which under certain pre-conditions can be introduced in small holdings as well. Therefore, this aspect of whether farming techniques would automatically improve under co-operative farming should receive serious examination. From observation it is noticed that improvements in techniques are effected only by systematic efforts and investment. So, the crux of the problem is whether with the same extent of State assistance provided for co-operative farming, better results under the conditions of individual farming cannot be attained if organisation in agriculture is suitably changed for such a purpose without imposition. Even under co-operative farming, the main problem would still remain; that is, even if a number of uneconomic holdings are pooled and transformed into one big unit to satisfy the norm of size, the larger unit would continue to be uneconomical if the same number of people with the prospect of an additional continuous pressure were attached to it and if the production per acre is not increased. These two major aspects of adjustment of the population to size of holdings and the improvement in productivity of land are not the automatic consequences of joint use of lands.

In suggesting co-operative farming on the ground of economics of size, the possibility of success should also be determined in relation to the characteristics of the agricultural set-up of the region in which co-operative farming is to be introduced. The set-up is either a newly reclaimed or a newly settled area or an area settled over a long period with a conventional pattern of cultivation and technique. The possibility of success would obviously depend on the responsive-

ness of the organisational base of agriculture to the type of co-operative cultivation that is sought to be introduced. In India, while new settlement activities in reclaimed and redistributed lands are bound to be important, they would, nonetheless, be restricted by the major extent of land being under settled conditions over centuries. The main object and a large part of agricultural planning in the country could, therefore, only be the promotion of agricultural progress in the settled areas of the old traditional villages. These are the main points which will have to be examined in determining the scope for adoption of co-operative farming under conditions of pressure of population and small holdings existing in India.

Position in India

India has only a brief experience in the working of co-operative farming societies in some States since 1948.²⁴ Many of these societies were not strictly joint cultivation societies but various types of service co-operatives and better farming societies. In Madras, there were land colonisation societies for agricultural labourers and retired service personnel, which again were not a real venture in co-operative farming. In spite of the recommendation of the ideal of joint cultivation, joint harvesting and profit sharing in these types of societies, it was reported that nowhere did this ideal find favour and each colonist preferred to cultivate his land on his own account and to keep to himself the fruits of his labour.

In the post-Independence period, attempts were made to form co-operative farming societies with the object of joint cultivation. There are just a little over 1,000 co-operative farming societies of which nearly 75 per cent are in Punjab, Bombay and U.P. All these societies were not formed with the spontaneous desire to correct the organisational deficiencies or the objective of deriving the benefits from co-operative farming but to evade the tenurial and tenancy reform measures enacted in the States. The evaluation of the results of some of these societies brought into bold relief the difficulties experienced in introducing and continuing joint cultivation. In the settlement area of the Ganga-Khadar, the joint farm management type of societies did not progress well due

²⁴ The details of the working of Co-operative Farming Societies are given in Chapter XIII.

to disputes on the differences in productive efficiency among workers. Experience in the refugee resettlement societies in the villages of Delhi State was similar.²⁵ Although land was initially allotted for joint cultivation, the constant pressure for individual allotment of land and complete individualisation of farming proved to be the bane of successful co-operative farming societies. In Gujerat and Baroda the attachment for one's own land was very strong and the measurement of quantity and quality of work of members was complicated.²⁶ In Bombay, where determined efforts were made to introduce co-operative farming, out of about 342 farming societies all except 40 were organised on Government lands for the settlement of landless workers; of the rest only about 20 were collectives. The organisation of cultivation on a collective basis in the farming societies, established with the object of settlement of landless persons, was not always practical and from the point of view of the main purpose of the organisation, it was even considered dangerous.²⁷

A recent survey of farming co-operatives carried out by the Planning Commission brought out the significant facts that the land was either obtained from Government or Rehabilitation Department and organised into settlement societies, or purchased and converted into reclamation societies or taken on lease from the former princes or big landlords. Only in 12 out of the 22 societies, members pooled their own land. Except in 16 societies, where members worked on the land, agricultural operations were done by hired labour. But even in farms worked by members, hired labour was employed.²⁸ The so-called farming co-operatives were merely either settlement societies or societies run by groups of absentee landowners having all the work done by hired agricultural labour, established just only to secure the concessions given by Government to co-operative farms. With a few exceptions, these co-operative farms are a kind of joint-stock estate farms of 100 to 600 acres.

²⁵ Co-operative Farming : Some Critical Reflections, Indian Co-operative Union, New Delhi, 1956, pp. 28-29.

²⁶ AICC *Economic Review*, 15th September, 1956, p. 26.

²⁷ *All India Co-operative Review*, September, 1956, p. 311.

²⁸ Studies in Co-operative Farming, P. E. O., Planning Commission, Government of India, December, 1956.

The conclusion that can be drawn from a brief survey of the farming societies in some of the States in India, is that experiments have not been planned enough. The highly unfavourable man-land ratio, the individualism of the peasant rooted in tradition, the paucity of first-rate leadership and the bureaucratic nature of the administration at the village level are all real obstacles to the adoption of co-operative farming on the basis of voluntary co-operation.

In the Plan period (since 1950-51), the objective under agricultural policy is to have at least one co-operative farming society located in every national extension block so that there would be about 5,000 planned experiments in all parts of the country by 1960-61. Judged in the light of progress achieved, the prospects do not seem to be bright for bringing under cultivation a substantial portion of agricultural land on co-operative lines over a period of 10 years as targeted. In laying down the broad objective of co-operative farming as the only agency towards better land management, the limitations of 'family holding' have been kept in mind. It is not denied that the service co-operatives can play an important role in assisting 'family farms' to increase agricultural productivity. While the usefulness of service co-operatives is accepted in the transition period, ultimately, co-operative farming, it is observed, has the advantages of spreading out the outlay and return over a much larger area and the mobilisation and utilisation of the capital resources available more fully. The main implied weakness in family farming is said to be the factor of money cost and benefit being related to the individual farmer rather than to the ends of social benefit.

In accepting co-operative farming in the Plan as the ultimate objective in land management, the experience is largely drawn from the working of co-operative farming in Communist countries like Russia, Eastern European States and China and also the non-Communist area of Israel. Only in China agricultural conditions are reported to be similar to India and therefore, that country is said to offer a model for India. In China, while in 1951, there were only a few agrarian co-operatives, by July 1956, 92% of the rural households were organised in one million agrarian co-operatives. Of these, over 30 per cent house-

holds were members of primary co-operatives and 62 per cent were members of the advanced type of co-operatives. In the former type, individual ownership was retained with a return for ownership as well as labour while in the latter, individual ownership was surrendered to the co-operative and there was only a return for labour. The area pooled by members ranged between 60 and 6,000 acres, the average area per household being from 1.2 to 2.5 acres. There was an overall increase in productivity by 15 to 20 per cent. The yield per unit has also increased.

The remarkable progress of Chinese co-operatives is attributed in a large measure to the sound practices of land management introduced, *viz.*, (i) the increase of irrigation facilities, (ii) measures for land improvement and reclamation, (iii) better seeds, (iv) intensive use of manures and fertilisers, and (v) improved cultural practices. Besides, the system of 'norms' or standards for assessment of performance of work, and the distribution of work in teams and groups fixing responsibility, the introduction of guarantees for output and techniques developed for training a large number of workers, had considerable effect on the efficiency of the co-operatives. The point for emphasis is that the application of scientific management in cultivation has been vigorously followed while the co-operative agency is only an imposition by the Communist or one Party system of administration. It is an important matter for examination,—how far in the absence of co-operatives, the application of scientific management supplemented by fixed prices and liberal loans granted by Government would have failed to yield these results? It is also a moot point for consideration,—how far a system worked under Communist or one Party administration could be successfully introduced in a country where there is still a strong adherence to the tradition of free enterprise and individual initiative and the desire towards socialism in the agrarian sector is yet to be created? The example of the latter condition is Japan where the service co-operatives predominated with more than 95 per cent of the total farm households as members. The co-operatives supplied 39 per cent of credit to agriculturists and mobilised 65 per cent of the savings. The marketing co-operatives disposed of 96 and 85 per cent respectively of surplus rice and wheat.

Prospect

The introduction of co-operative farming in India is in a state of controversy. One would have to wait before the local conditions in different parts of the country are studied and the responsiveness of the agriculturists to the working of agrarian co-operatives ascertained before any drastic steps are taken by Government for the quick implementation of a scheme of co-operative farming as in China. The latter may have immediate scope only in the settlement of reclaimed areas and in the areas collected and distributed under the *Bhoodan* Movement. Even here, the statistics show that out of nearly 4.2 million acres of land collected under *bhoodan* upto 31st October 1956, only about 0.6 million acres had been distributed. How much of the latter has been organised on the principle of co-operative enterprise is not known. This would again indicate the difficulties in the way of a rapid promotion of co-operative farming societies merely under legislative fiat without creating the pre-conditions necessary for such a type of organisation.

CHAPTER XI

RURAL ENGINEERING

The achievements of modern science have contributed to man's control over nature mainly through developments in engineering. It is not therefore without reason that in the development of economic thought the need for a science and art of social engineering has been emphasised and found a place. Engineering gives us control over technique in the fields of production, transport, housing and a myriad other branches of individual and community life and therefore would enable us to plan and control social phenomena and institutions. Broadly, engineering is divided into mechanical, civil, sanitary and electrical. The subject for examination here is how far these branches of engineering are capable of transforming the rural environment. Mechanical engineering has brought about in the West improvements in tools, implements and machinery and laid the foundation of this Machine Age. It has played its part in elevating rural life to a new plan by providing new agricultural implements which have made large-scale farming possible as in the U. S. A. and U. S. S. R. Civil engineering has contributed to the growth of cities and towns, development of roads, canals, railways, and land reclamations, etc. Sanitary engineering has been employed for the improvement of living conditions through extensive schemes of housing, water supply and town planning. And electrical engineering has been the foundation of what is sometimes called the New Industrial Revolution, comparable in its effects with the earlier revolution based on the substitution of steam for water-power or just the power of the human muscle. It received a great stimulus by the invention of hydro-electricity and recently of thermal electricity, on which is built up a diversified industrial structure in countries like France, Germany, Switzerland, Japan and Russia. It is not, of course, suggested that these four branches work separately. In most projects, they have to be combined and co-ordinated so as to give the best results. The point is that it is mainly through developments in these four branches that far-reaching changes in rural life and environment have been brought about in European

and American countries, and the same results could be obtained in India through a programme of rural engineering.

MECHANICAL ENGINEERING

The possibilities of any large-scale mechanisation of agriculture in this country are at best limited, at least so far as the immediate future is concerned. There is, however, immense scope for improved tools and implements which could be utilised by our farmers on their small holdings and under diverse local conditions of soil, rainfall, etc. The agriculturist as well as the village artisan needs cheap, light and simple machinery, and developments in mechanical engineering which provide the same need specially to be fostered.

CIVIL ENGINEERING

It is obvious that in India civil engineering has developed more than any of the other branches mentioned, and there is still immense scope for further development. The main direction in which progress has been achieved is irrigation. Road transport, canal transport and land reclamations and improvement have, on the other hand, received scant attention.

IRRIGATION

The facts regarding the need for an assured and adequate water supply for agriculture have been given in an earlier chapter. To recapitulate them briefly, except in the Indo-Gangetic plain and the West Coast, deficiency of rainfall causes harm both to man and cattle and often results in famine. In parts which are practically rainless, cultivation is not possible without irrigation. The uplands of the Deccan are constantly exposed to drought. Further, crops like rice and sugarcane require large quantities of water at regular intervals, and this is available only in a few regions. In a word, the prosperity of Indian agriculture is ultimately bound up with the progress of irrigation.

Evolution of Government Policy

The attention of the Government to the need for irrigation works was drawn sharply by the various famines during the 19th century, but Government was reluctant upto the end of the century to face up to the question in all its seriousness, mainly

out of considerations of cost. Their policy was to develop productive irrigation works and to neglect protective ones. It was in 1901 that the Irrigation Commission emphasised the protective value of irrigation works and pointed out that the indirect savings they may bring about by reducing the cost of famine relief, and by obviating the need for remissions of the land revenue, etc., would often make up for the expenditure on such works. More than this, however, the Commission argued that "the expenditure which the Government may legitimately incur on famine prevention cannot be limited by a consideration of the reduction in the future cost of famine to the State which will result from such expenditure" and that "a much higher scale of expenditure may be justified for the sake of saving the inhabitants of insecure tracts from all the losses and demoralization and miseries of famine."

As a result of the above recommendations, fresh Provincial surveys were made and a large number of new irrigation projects were undertaken. Till 1939, all the irrigation projects in India were controlled by the Government of India and were sanctioned with the approval of the Secretary of State. Under the Reforms of 1919, irrigation was classed as a Provincial subject. Since then, there has been greater activity in regard to irrigation and several projects have been undertaken. The Sutlej-Valley works were sanctioned in 1921-22 and were completed in 1932-33 at a cost of Rs.33.31 crores; they irrigated in 1938-39 an area of 1,649,459 acres against an estimated area of 1,942,000 acres in British India; the project was expected to irrigate a total area of 5 million acres in course of time. In Bombay, the Bhandadhara Dam and the Lloyd Dam at Bhatgar were completed in 1925 and 1926 respectively. In the U.P. the Sarda Canal was opened in 1928 and it irrigates about $8\frac{1}{2}$ lakh acres. The Cauvery-Mettur project, started in 1925 and completed in 1934 at a cost of Rs.737 lakhs, serves an area of 1,300,000 acres. This scheme also includes supply of hydro-electric power for industrial purposes. In most cases, especially in the Punjab entirely new areas were brought under cultivation.

The Royal Commission on Agriculture recommended co-operation between the Irrigation and Agricultural Departments,

the creation of local advisory committees, and the establishment of a central bureau of irrigation at Delhi. The last recommendation was given effect to with the establishment in 1931 of the Central Bureau of Irrigation as an adjunct to the Central Board of Revenue. Its functions include supply of information to provincial officers, co-ordination of research in irrigation and propagation of the results achieved.

The Russell Report suggested the establishment of a central irrigation station for all India for working out the agricultural problems. The station should serve as a centre for the study of the relations of soils, water, and growing crops, the inter-action between salt water and soil, the reclamation of salted and alkaline land, the movements of sub-soil water, and the agricultural effects of various sequences of crops. The same Report also suggested that there should be more complete co-ordination of the investigations on dry farming which should be linked up with the work of the proposed Irrigation Research Station.

The constitutional set-up of the country as an independent democratic Republic provided the necessary scope for the evolution of a national policy in irrigation. Since 1945, the Central Government has been encouraging and actively assisting in the development of irrigation and power projects. In the post-Independence period there has been considerable activity in all parts of the country in new irrigation and power projects. Fortunately, on some of these works, detailed investigations and economic studies necessary to obtain a correct appraisal of the technical and financial aspects of the projects were already available. Irrespective of the relative importance or merits of the projects under construction or those not yet started, the highest priority under the policy was given to projects on which considerable sums of money have already been spent. It was not possible, therefore, to include many new works of irrigation. It aimed mainly at the completion of the projects already under construction. The projects under construction were calculated to irrigate an additional area of 8.5 million acres in the last year of the First Plan. After the completion and full development of these projects, the total addition to the area was expected to be 16.9 million acres. After considering the large number of new projects which were

pressed upon by State Governments but which had not been thoroughly investigated, only five major irrigation and power projects were accepted for inclusion in the Plan. The total cost of these projects, *viz.*, Kosi, Koyna, Krishna, Chambal and Rihand, was estimated at over Rs.200 crores. In addition to these major projects, a large number of small schemes, construction of wells, renovation of tanks, improvement of small streams and rivulets, etc., classed as 'minor irrigation works' were included in the programme for agricultural development. The total estimated cost of these minor schemes was Rs.47 crores for the first five-year period of the Plan. Much of the expenditure on such schemes was by way of subsidies, loans, etc., to individuals or societies who could contribute similar or greater share of expenditure. An additional area of 8.2 million acres was targeted to be brought under irrigation by 1955-56 under the schemes. There was a further provision of Rs.30 crores for minor and medium irrigation works which would bring an area of 3 million acres under irrigation. The total cost of irrigation projects included in the First Plan was about Rs.720 crores. In all, the net effect of all the schemes included in the First Five-Year Plan was to utilise about 100 million acre-feet of water per annum in a normal year. This constituted 7 per cent of the total utilisable water resources of the country.

As compared to the target of 8.5 million acres, the irrigation potential amounting to about 6.3 million acres had been created at the end of the First Plan. The actual area irrigated was, however, only a little over 4 million acres.¹ An additional area of 21 million acres is expected to come under irrigation by the end of the Second Plan period. The total irrigated area would thus increase by almost 75% in 10 years. Of the 21 million acres to be brought under irrigation in the second period of the Plan, some 12 million acres will benefit from large and medium projects and 9 million acres from minor irrigation works. Of the bulk of the additional irrigation from large and medium projects, some 9 million acres is expected to result from the completion of the programmes initiated in the first five-year period; there will be an additional ir-

¹ Appraisal and Prospects of the Second Five-Year Plan, Planning Commission, Government of India, 1958, p. 47.

rigation of 3 million acres from the new projects included in the Second Plan. On completion, the irrigation potential of the major and medium projects initiated in the Second Plan will be 15 million acres. The rate of increase will be on an average 2 million acres per year over the first 3 years and 3 million acres in the last 2 years. The policy is to devote increasing attention to medium size projects in view of the need for a steady increase in agricultural output. Apart from the quick yielding nature of the medium size projects, the benefits of irrigation will spread among different regions evenly under the scheme. The total cost of new irrigation projects included in the Second Plan is about Rs.380 crores. Besides, 3,581 tube-wells are proposed for construction at an outlay of Rs.20 crores providing irrigation facilities for 916,000 acres.

Position: 1955-56

The present position may be summed up as follows: The net area irrigated in 1954-55 was 54.2 million acres, against 46.6 million acres in 1947-48 after partition. Of this area, 19.3 million acres were served by Government canals, 2.8 million acres by private canals, 9.9 million acres by tanks, 16.6 million acres by wells and 5.6 million acres by other sources. During the First Plan, additional irrigation of 16.3 million acres would have been achieved. The total capital outlay (direct and indirect) on irrigation and navigation works was Rs.128.74 crores in 1949-50 and the net revenue receipts were Rs.6.9 crores yielding a return of 4.10 per cent.

Irrigation facilities may be said to be in an advanced state in the U.P., Bihar, Madras, Punjab, Assam and Orissa where on an average, one-fourth of the area is under irrigation. In Bombay the percentage of area irrigated to net area sown is only 4.5. Bengal has also poor irrigational facilities, but these are States which receive good rainfall.

More than a fourth of the irrigation in India is provided by wells irrigating about 16.6 million acres of land. There is much scope in all parts of the country for the expansion of irrigation by wells. The Royal Commission on Agriculture recommended Government assistance for the development of tube-well irrigation through expert advice, provision of finance on "taccavi"

system and supply of boring equipment and skilled labour on payment of a moderate charge.

Tanks, like wells, act as reservoirs which irrigate small areas roundabout. These are of great help to the rural population, especially during the break in the monsoon; they further raise the level of the subsoil water and thereby reduce the cost of irrigation. The area irrigated by tanks was 9.9 million acres in 1954-55. Tanks are of great importance in Andhra and Madras where they served 4.6 million acres of land. Many of the tanks are dilapidated and require repairs, especially in localities where canal irrigation is not possible.

Defects in Government Policy

The following table gives an idea of the relative importance attached by Government to productive and protective irrigation works:²

			Productive works	Protective works
Area irrigated ('000 acres) .. ..	..	..	15,353	3,923
Mileage in operation ('000)	..	..	45	20
Capital outlay (Rs. in lakhs)	..	..	6,075	6,621

The policy of Government is to give preference to productive works (*i.e.*, those that yield within ten years of their completion a net revenue sufficient to cover the annual charges on the capital investment). Protective works which are intended to ensure protection against famines in regions of precarious rainfall have not been sufficiently developed.

Governments have been spending large sums of money on famine relief. In addition, large sums are spent by private bodies on relief. The aggregate amount spent must be an enormous figure. If these facts are taken into consideration, the urgency of providing funds for protective irrigation works will be readily

² Statistical Abstract, India, 1952-53, p. 478.

appreciated. The economic and human losses of such magnitude cannot be allowed to continue merely on the ground of difficulty of finding the initial necessary financial resources. In the fixing of irrigation dues also, a policy of moderation is the one that promises the best results in the long run, and it would be economically justifiable if the supply of water through irrigation is subsidised by means of specially low prices in the larger interests of agricultural improvement and prosperity. This aspect of the question has not received the attention it deserves.

Scope for Improvement

The possibilities of extension of irrigation in India are great and in order that agriculture may not be affected by the vagaries of the monsoon, every step should be taken for the extension of irrigation systems. Whether such activities are remunerative to Government or not should not be the main consideration. It is a question of providing water facilities for the maximum use of land and labour for successful production of crops. It is urgently necessary to give a more secure and better standard of living to the peasants who are handicapped by insecurity all along. Government should review the position in regard to outstanding irrigation projects from time to time and try to overcome engineering and financial difficulties, if any. A survey should be made of all the possibilities of diverting flood and surplus water to regions of deficient rainfall, where there is an urgent need of water for the irrigation of the "*kharif*" crop, and for storing in the soil for growing "*rabi*" crops.

The Bombay Irrigation Inquiry Committee (1938), while recommending that the capital expenditure on irrigation projects should be increased from Rs.10 lakhs per annum to Rs.15 lakhs per annum, remarked that although their direct financial results may be disappointing, the irrigation works as a class are of substantial value to the rural population, and that if the Government are able to spend more money, and carry out extensions and developments at a faster rate, there is full justification for such a policy. Further they observed that "instead of discussing first principles and deploring past losses every time a new project has to be sanctioned, the general policy of Government in our opinion should be to sanction new works, if they can afford the

outlay, without expecting a return in the shape of full interest charges in less than twenty years." These remarks would probably apply with equal force to other States also.

RURAL ROADS

The importance and urgency of providing for rural communications on an extensive scale hardly needs any emphasis. The absence of such roads has all along been a serious handicap in the way of efficient and economical marketing of agricultural produce. The excessive preoccupation of the British administrators with the needs of foreign trade led them to concentrate on railways and on the requirements of larger towns and cities to the detriment of village roads. In the layout of the road system military considerations had a larger weight than those of rural development. With the advent of the motor bus and the possibility of using electricity for power, a new vista of possibilities has been opened up and the time has come for formulating a plan of road, river and canal transport so as to co-ordinate them into a complete transport system.

Position: 1955-56

There are four trunk roads with which subsidiary roads are linked: (i) from Khyber to Calcutta; (ii) Calcutta to Madras; (iii) Madras to Bombay and (iv) Bombay to Delhi. On the whole, trunk roads covered 5 000 miles out of a total metalled road length of 97,546 miles in 1950-51. As regards subsidiary roads, South India is best provided and parts of Rajasthan, Punjab, Orissa and Bengal the worst. The absence of good subsidiary roads is attributed to sparseness of population in some regions, unbridgeable waterways and lack of suitable road materials. In addition to metalled subsidiary roads, there are "*kachcha*" (unmetalled) roads, which covered 151,000 miles. On the whole, there are road facilities of 327,000 miles in India with its 5,58,089 villages and 3,018 towns. In other words, there is a provision of 0.58 mile of road per village. Assuming that an average length of 8 miles of road is required for each village,³ only 7 per cent of the village road requirements are met. Many a village continues to be inaccessible to main roads. Even the existing roads, bad as they are, are allowed to deteriorate

³ Cf. S. S. Naik: "Rural Communications," *Quarterly Journal of the Local Self-Government Institute*, p. 585.

further owing to neglect, especially by the local bodies. Further, the growing motor traffic is wearing out the roads at a rapid rate and a new problem of road construction and maintenance is thereby created.

The figure of 0.58 of a mile given above is again an average and most of the roads link towns and not villages. The absence of a sufficient mileage of village roads is a serious drawback in the system of communications. A vast majority of villages have no roads at all. What are called village roads are mere water-courses, narrow, zig-zag, deep and cut up in places because of heavy cart traffic. These tracts are servicable only during fair weather and are useless during the monsoon for want of bridges or properly built causeways. During floods, communications are held up for periods varying at a time from a few hours to some days. The condition of these roads in different seasons differs with the nature of the soil: roads in black soils become sticky and impassable during the rains; those in the light "*gorat*" soils a little less so, but they become easily scoured and get deeper; those in the sandy soils as of North Gujarat become impassable in hot summer months and people have to avoid using them at noon-time; "*moram*" soils of Kathiawar are the least troublesome, and village roads are not a problem there.

The Royal Commission on Agriculture, while admitting the necessity of good main roads, emphasised the importance of subsidiary communications which are of even greater concern to the cultivator. "The provision of excellent main roads adequate in all respects for every form of transport is of little benefit to the cultivator, if his access to them is hampered by the condition of the road which connects his village with them. What matters most to him is the state of the road between his village and the main road and his market."⁴

After the advent of the railways in the early part of the century, the development of roads was paid less attention until the constitution of the Central Road Fund in 1929. Since then much progress has been noticed as under. This scheme provided a continuous supply of funds. The Nagpur Plan (1943) of Post-War Road

⁴ Report of the Royal Commission on Agriculture in India, p. 373.

Development laid down certain broad objectives for development of roads. The objective underlined in the Nagpur Plan was that no village in a well developed agricultural area should remain more than 5 miles from a main road. On this criteria, it took a long range view of 20 years and proposed that at the end of this period all villages should have been covered by link roads. The special needs of Part B and Part C States required immediate attention after the political integration following partition. These areas were to be closely linked by the improvement of existing roads as well as by the provision of missing links and bridges.

During the period of the First Plan, the estimated addition to the new surface roads is about 24,000 miles and low type roads of about 44,000 miles, in addition to the improvement of 10,000 miles of existing roads. Since the partition, the total investment on road development has been Rs.200 crores, of which Rs.48 crores were spent between 1947-51. In the Second Plan, the outlay on road development would amount to Rs.246 crores in addition to Rs.25 crores as contribution from the Central Road Fund. With this investment the proposal of the Nagpur Plan is expected to be realised by 1960-61.

Type of Road Suitable for Villages

The village road should serve as a link between the village and the nearest market town or to the nearest public road of class I or class II for the purpose of transport of agricultural produce by the cultivator. The villagers carry their products to and bring their requirements from the market along such village roads. The vehicle required for transport is the bullock cart of country design. The bullocks are used for agricultural operations during the growing season and for draught in the off-season. The quantity carted by each cultivator is not much, and his produce can be discharged at the market in a few trips in the season. For this purpose, there is no need for a I or II class road or a motor vehicle for transport. One has to remember that for the small cultivator carting is a subsidiary occupation and in the zeal for road making care should be taken that he is not deprived of this source of income unless there is a distinct compensating gain from higher values for his products. Already complaints are heard that motor traffic has deprived these men of their small source of income with the result

that some of them are unable to maintain a pair of bullocks for the whole year. They are, therefore, selling them away and hiring a pair at the sowing time for two or three days, paying sometimes Rs.3 or Rs.4 per day per pair.

Bearing the above points in mind, the type of surface required may now be considered. There are usually five types of road surface: (a) the all-weather "*pukka*" road with dust-proof heavy surface with bridges; (b) the above type of road with "crete" ways for vehicles and macadam surface for the remaining width; (c) the "*pukka*" road with macadam surface with bridges; (d) the "*pukka*" road with macadam surface partially bridged; (e) the "*kachcha*" road with few bridges.

The first type of road is obviously the best if finances permit its construction in villages. The other types of road cost less in the descending order. If the villages of India have to be provided with roads, they must be of the "*kachcha*" type, which is the cheapest. More funds cannot be utilised for road construction as there are many other calls on the limited resources of the country, such as education, sanitation, agricultural development, etc. The "*kachcha*" type of road would be sufficient to meet the needs of the villages mentioned above.

Problem of Realignment

In this connection, mention may be made of the question of realignment of roads. Many of the village roads are water-courses and are often so crooked that people take short cuts across fields thereby destroying crops. These roads have to be realigned so as to save labour and time. The villagers themselves would voluntarily render assistance if they are properly instructed and the work is not too costly. As a matter of fact, in the past, the villagers used to do this kind of work every year after the "*Dasserah*" festival. Under the supervision of the village headman the villagers would repair the roads, straighten them, and clear the hedges growing on the road side. Nowadays, however, owing to the breakdown of village autonomy, the roads are not maintained in good condition with the evil consequences already mentioned. Here, again, the "panchayat" could be utilised as a suitable agency for collective work by the villagers themselves.

Then, again, the formation of ravines, and other erosions cause diversion of roads from their usual layout, and thus add to the difficulty. The village community is often unable to stop this damage by bunding or the construction of low-level bridges and the evil grows continually. In some tracts where a number of rivers pass through a taluka this problem assumes serious proportions.

The broad aim of road development programme in a country like India should be to connect the villages with marketing centres and taluka and district headquarters. The State Governments should pay special attention to the construction and maintenance of these roads and for this purpose enlist the co-operation of villagers. Before the road programme is drawn up for a taluka a preliminary survey should be made to find out the most economical method of realignment to serve this purpose. In Baroda a road survey of a taluka indicated that considerable saving could be effected if proper alignment was followed as the realignment must take into account the nature of the soil. In 'gorat' soils with deep roads it becomes difficult but in black soil where the roads are not very deep it may not be difficult to realign them and make them straight provided facilities are available for the exchange of lands between the cultivators. This is often a difficult matter but given a sympathetic attitude on the part of the official machinery, under the legislative reforms in progress, a simple and expeditious procedure for measurement, valuation and exchange of land as also for the ultimate settlement of accounts can be formulated and valuable results can be attained. When this difficulty is overcome the State Government should enlist the co-operation of villagers who should supply their own manual labour and prepare new straight "*moram*" roads. Once the saving of the crops as a result of this realignment and reformation of roads as well as the advantages of accessibility to marketing centres are demonstrated to the villagers it would undoubtedly receive the appreciation of the rural population who would not hesitate to co-operate in this constructive endeavour. There is considerable scope for development of village roads on such co-operative basis by mobilising the local population for executing the local projects in the Community Project areas. Village roads are in fact being developed on this basis with the active co-operation of the villagers themselves who contribute a portion of the cost of construction by way of free labour, free gift of

land or money, the balance being contributed by State Government or District Boards. Nearly 16,000 to 17,000 miles of *kachcha* roads were estimated for completion within the period of the First Five-Year Plan.

Financing of Village Roads

The Indian Road Development Committee remarked that "road development in India is passing beyond the financial capacity of local governments and local bodies, and is becoming a national interest, which may, to some extent, be a proper charge on Central revenues." Construction of village roads will naturally increase the goods traffic of the railways and motor buses, which would in turn fetch greater income for the Central Government. The Central Government may finance bigger roads so that State funds released thereby may be utilised for village and feeder roads. The Royal Commission on Agriculture expressed the view that road development may be expedited by raising loans for financing the same. It was further stated that in view of the quasi-permanent nature of the roads, the annual amount required for amortisation of these loans should not be a heavy charge on the State Governments' resources. As regards the maintenance of village roads, the Commission rightly observed that "any improvement in the condition of village roads must depend largely, if not entirely, on the efforts of the villagers themselves." The proper course would be to induce the villagers, through the "panchayat", to supply the labour necessary for this purpose more or less at a nominal wage as a matter of social duty. The Motor Vehicles Taxation Enquiry Committee (1950) recommended certain proposals for augmenting the resources of road development, as continuity in the supply of fund is essential for avoiding wasteful expenditure and pursuing even modest programmes without interruption. Under the Community Projects and National Extension Service schemes of rural development, 6,029 miles of metalled roads and 38,000 miles of unmetalled village roads were constructed and 22,000 miles of existing roads improved in the First Plan period.

To sum up, village roads are essential for the economic improvement of the agriculturist. It would be sufficient if "*kachcha*" roads are provided linking the village to a primary market or to class I or II road. As regards finance, the revenue gathered for

road development and by way of petrol duty should be utilised, and there should be definite and substantial allotments for rural roads. The work of annual repairs to these village roads may be entrusted to the villagers themselves through a system of corporate labour.

SANITARY ENGINEERING

Housing Problems in Villages

The problems of sanitary engineering with reference to the needs of the village are next in importance. Usually, when one mentions the housing problem, one thinks only of urban housing, and housing especially for industrial labour. But it would hardly come as a surprise to people who know village life that housing in the villages is also a serious problem, as the conditions prevalent are a great source of danger to the health, efficiency and even morality of the people. The houses in the villages may be divided according to their quality, into three categories. First come those which are well-built, fairly well-ventilated and with sufficient accommodation for men as well as cattle. They are generally built of brick-masonry. They are owned by *brahmins*, *baniyas*, landlords, village officers and such other members of the higher sections of the village community. Such well-constructed houses may be, at the most, 10 per cent of the total houses in the village. But even in these relatively commodious houses, occasionally cattle may be found sharing the same room with human beings, not for want of space, but because of a peculiar belief that the cattle need attention of the housewife at night.

Next come houses which are of mud-masonry and have thatched or tiled roofs. These are ill-lighted and ill-ventilated. The whole family and even the cattle live in the same room except during the hot season. These houses are highly insanitary and unhygienic for human habitation. Any attempt to open windows in them is resented and such windows as there must be under the law, if any enacted, are soon covered up or plastered. The inmates have no vitality to resist climatic changes; nor have they separate space either in the courtyard or a separate shed, where cattle may be stabled. Usually, the kitchens are in the living room and in the absence of chimneys all the smoke hangs on in the living apartment for a considerable time. The third class of houses are mostly those

of the labourers and the village menials. They are small and flimsy structures of mud, dark and infested with flies and mosquitoes. With the insanitary habits of the inmates these dwellings are more like village slums.

On the whole, there may be a few houses in our villages here and there which may be considered well kept. But, viewed from modern standards of sanitation and hygiene, the majority of them are certainly unfit for human habitation. Usually, these are huddled together, with very narrow lanes in between. The manure pits and the refuse dumps are very near the dwelling houses and in many cases the uneven ground roundabout where filthy water accumulates is a perpetual source of malaria and other diseases like *kala azar* and hookworm.

Lest the people's susceptibilities should be touched, not much work is done by Government agencies to improve housing conditions. The only work done is confined to the opening of windows by the sanitary staff. There may, however, be a few exceptions, such as in Gurgaon where excellent work has been done in this direction under the inspiration of Col. Brayne. The Bengal Land Revenue Commission Report observed that of all the four Provinces, Bengal, the Punjab, Madras and the U.P., visited by them, Bengal was the worst in respect of housing conditions. On the other hand, Gurgaon (Punjab) was the best. This proves the oft-repeated thesis that where sympathetic efforts are made and proper facilities are provided, people are not averse to improvements. The main handicaps are low vitality of the people, a decadent social system, and the limitation of financial resources.

It would be difficult to alter the housing conditions all at once. It would require education and propaganda for a long time. This indicates an entirely new line of approach to this problem. To ensure successful and lasting results, the problem needs to be tackled from more than one side. Education of the right type would have to be given to the villagers so that they may know the value of clean surroundings and sanitary living. Possibly, in order to avoid congestion, house-planning together with strict enforcement of general rules of sanitation through the "panchayats" would be necessary. Under Indian conditions, the approach to this whole

problem would be easier if services of female workers are enlisted for propaganda and instruction as they can influence the women-folk concerned more effectively. Better houses cost money and so ultimately the housing problem gets linked up with the problem of raising rural incomes. In the meanwhile, it would be necessary to enlist the active co-operation of the village "panchayats" so as to make the best use of local initiative and interest. At the same time, Government must assist in the task of relieving congestion and extending the village area. In several cases it is difficult to acquire land for the extension of village sites; it takes years to decide conflicting claims and resolve objections from people to the acquisition of their lands. There should be an expeditious procedure for this question. Along with this, the village people, particularly the farmers, should be granted special facilities, (i) to enable them to live on the fields wherever possible, (ii) for the creation of new hamlets in the "seem" area and (iii) to provide land for cattle sheds ("vadas") adjoining or near their houses where possible. Rural Co-operative Housing Societies financed and otherwise helped by the Government should also be started.

Much attention has not been paid so far to village planning in India. In some cases, there is a penalty imposed on farmers building "*pucca*" houses in their fields. This anomaly should be removed by granting a concession in land revenue for a certain number of years for the area occupied by such houses. The advantages of such a move are obvious from every point of view. It would be an incentive to a consolidation of holdings. Special loans should also be granted free of interest to construct sanitary farm-houses on approved models in village areas also.

In this connection, it is necessary to emphasise that engineers in India should specialise in the construction of rural houses with mud-masonry, bamboo and other cheap materials locally available. Several designs should be prepared for different climatic conditions and environments and made available to the "panchayats" for guidance. There are a number of qualified engineers in the cities, but it does not appear that they have so far seriously considered the problem of rural engineering. This is a commentary as much on our educational system as also on the attitude of Government to problems of welfare in village areas.

The improvement of housing conditions in rural areas is a task of great magnitude. There are 54 million houses in rural areas most of which require to be rebuilt. From the investigation of housing conditions in 943 sample villages by the National Sample Survey (7th Round, October 1953 to March 1954) it is noticed that 85 per cent of housing have mud plinths, 83 per cent walls of mud, bamboo and reed and about 70 per cent roofs of straw, grass, reed, mud, etc. Only about 7 per cent of the houses have plinths and walls of brick, cement or stone and roofs of corrugated sheets, tiles, etc. More than 95 per cent of the houses have no latrines attached to them. About 70 per cent of the houses have no sources of water supply for drinking except the common wells. About 81 per cent of the houses had 3 rooms or less. One-room accounted for 34 per cent and two-rooms for 32 per cent. About 38.5 per cent of the households had less than 100 sq. ft. per head of floor space and about 32.5 per cent between 100 and 200 sq. ft.

The designs of houses in villages even for the privileged or better-off sections of the population do not provide for the minimum requirements of light, ventilation and drainage. The artisans and other village craftsmen live and work under conditions which are a serious impediment to the adoption of improved techniques. The congestion which exists in the area where the Scheduled Castes, and other backward classes reside is the worst. This emphasises the need for finding additional sites and rearrangement of the village sites.

The prevailing housing conditions indicate the urgent need for a plan for every village which will provide for the improvement of rural housing as a part of general rural development. There are, however, certain specific measures which can be taken in the short period. The problem of housing in rural areas does not call for a large financial outlay. The bulk of the materials used are locally available and there is considerable scope for voluntary co-operative labour and local community action. The rural housing programme is, therefore, essentially in the nature of aided self-help programme in which education and guidance play a large part. The two principal ways in which the State can assist in the improvement of standards of housing in the villages are (1) through the demonstration of model houses built in selected

areas, (2) and building better type of houses at low cost within the means and resources readily available to them in the locality. It is estimated that the money cost of a house built with the villager's own labour is not likely to exceed Rs.200 to Rs.300 per unit. What the State can do, therefore, is to undertake pilot projects to construct such low cost units and disseminate information on the experiments made in cheap housing in the various parts of India. In Puerto Rico a similar programme of aided self-help in housing has yielded good results. Conditions obtaining there are similar in many ways to those obtaining in this country. The principle as practised in Puerto Rico may be usefully adopted in India in areas which offer scope.

The main lines of policy recommended in the First and Second Five-Year Plans in regard to rural housing are that it would be desirable for every State to have a small technical unit in its housing department for evolving designs of houses and layouts suited to local conditions and for studying possible uses of local materials. Further there should be a co-ordination of the efforts of all the agencies of government in rural development. Co-operative societies should be organised where there is some provision for financial assistance to backward classes. In other cases, assistance from government should mainly be in the form of technical advice.

Village Water Supply

Another subject of equal, if not greater, importance to village life is supply of clean drinking water. In the absence of this facility, people suffer from many diseases and fall a prey to epidemics like cholera. There are any number of villages that have no adequate water supply. In some places the water is contaminated as the same water source is used for drinking purposes as well as for washing, including the washing of animals. In some cases, the natural supply is short; in others, there is lack of proper care. Adequate arrangements for all the water supply needed for various purposes should be a primary responsibility of the local body in charge, and proper supervision in this respect by officials is an obvious corollary of the same.

In the development of agriculture the Planning Commission took note of the need for providing adequate water supply for

drinking purposes and sanitation programme. A specific scheme of water supply and sanitation was formulated by the end of 1954 under which Rs.6 crores were made available as grant towards rural water supply schemes. In the First Plan period, under rural sanitation, 42,000 drinking water wells were constructed and 65,000 renovated. Under the Second Plan, a tentative provision of Rs.28 crores has been made for rural water supply. The evaluation of the programme indicated that in the first five-year period of the Plan, the scheme did not make satisfactory progress on account of shortage of material, inadequate transport facilities and the absence of adequate public health engineering staff. Rural works were frequently executed by a variety of agencies and became purely construction projects with little public health education of the villagers in the need and use of sanitary facilities. However, it has been noticed that a large number of villagers have been able to improve their water supply through local development works and through the national extension and community development programmes.

LAND UTILISATION SURVEY

All the engineering schemes reviewed pre-suppose the need for a land utilisation survey. Land utilisation is, however, a term used primarily in connection with agricultural land so that it often means merely soil surveys. The test for land utilisation, in the words of J.L. Buck, "is the satisfaction which the farm population perceives from the type of agriculture developed, the provision for future production and the contribution to national needs."⁵ Proper land utilisation in this sense implies an examination of the natural factors affecting both the present and potential productivity of the land. These factors are the general configuration of land, temperature, rainfall and soil, which together constitute the physical background of agriculture and determine the limits of cultivability and productivity of land. Soil fertility is a complex phenomenon and cannot be explained merely in terms of the physical and chemical properties of the soil. It also depends on factors such as aeration, structure, texture, age and methods of management of the soil. The type of soil is an important factor determining the suitability or otherwise of growing a certain group of crops. Steady maintenance of the productive power of the soil is another important aspect

5 Land Utilisation in China, p.1.

in land utilisation. Since, however, one use of land excludes another, it is necessary to assess fully the potentialities of all types of land in respect of all possible uses, and the problem thus gets linked up with engineering in the broad sense.

Progressive countries like the U.S.A. and the U.S.S.R. have completed extensive soil surveys and mapped out all types of soil profiles. In the U.S.A., States Planning Boards have been started as a result of land utilisation surveys conceived on a broader basis. China has also completed a land utilisation survey. Even in England, which is not primarily an agricultural country, land utilisation survey has been functioning for the last twenty years. In India, however, a comprehensive scientific survey of land has not been taken in hand. But the population of the country has been increasing rapidly, and if the people have to depend on the available resources of the country, land utilisation surveys with a view to the best possible utilisation of land are essential. Such surveys would throw valuable light on the possibilities of utilising the vast tracts of hitherto uncultivated land and would also indicate the scope for preventing soil erosion and maintaining the productivity of lands under cultivation. Problems of water-logging, land reclamation, drainage, irrigation and engineering can be tackled rightly only when we have the necessary detailed data which a complete land utilisation survey alone can furnish.

Tennessee Valley Project

As an illustration of the way in which a land utilisation survey can become the basis of a policy of developing particular regions the Tennessee Valley Project in the U.S.A. may be mentioned. The TVA (Tennessee Valley Authority) has a comprehensive plan for the huge region in its charge, worked out on well-thought-out scientific lines and takes in agriculture, the conservation of soil, of water-power, of mineral wealth, of game, and of forest; health, diet, housing (standards of which were in general very low in the region); education, development of farming and of rural industries by means of cheap power and other amenities of life. Wherever possible, the TVA works through existing organisations. Advice and grants together secure that the broad lines of the plan are being realised, and, what is more, the active co-operation and enthusiasm of the local people are enlisted.

Another important point about the TVA is its regional character. It operates in a region big enough to make large-scale planning worthwhile in matters like flood control or the provision of electric power, but not too big to include fundamentally different problems of life and interests. The Tennessee Valley is, from the standpoint of human biology, a natural region, and of the right size for planning.

It has developed the Tennessee River system for generation of power, flood control and navigation. It has helped to produce about 40 billion kW. of power a year since 1954, benefiting 1.4 million consumers—about five times as many as had electricity in the same area in 1933. Ninety-three per cent of the region's farms are electrified compared with 3 per cent in 1933. In the fiscal year 1954, the entire area served by TVA used 30 billion kilowatt hours as compared to $1\frac{1}{2}$ billion in 1933. In the industrial development of the regions, its multipurpose dams, its forestry and agriculture aids, and its service to industry have helped to make it possible for the people to increase their *per capita* income more than 539 per cent since TVA began, compared to an increase of 364 per cent for the nation as a whole. *Per capita* income of the people of the Valley has increased from 40 per cent to 61 per cent of the national average. There has been a net increase of 2,000 manufacturing and processing plants in the region.

The integrated system of 30 dams which controls the flow of the Tennessee River system provides nearly 12 million acre-feet of storage for the reduction of floods and make possible generation of $3\frac{1}{2}$ million kilowatts of power. The benefits of flood control extend far outside the Tennessee Valley. Of the \$11 million estimated average annual benefits of TVA flood control, more than half are outside the Valley. The TVA provides security from floods to 6 million acres of productive Mississippi Valley land and reduces the frequency of flood on an additional 4 million acres.

TVA multipurpose dams provide a modern channel linking the Tennessee Valley with the 9,000-mile inland water-way system of the U.S. River traffic is running at the rate of 1.3 billion ton-mile annually as compared to 33 million in 1933, that is 40 times as great as it was before TVA. In 1954 shippers using the Tennessee saved about \$14 million in transportation charges.

It also operates chemical laboratories and plants for research and manufacture, and serves as a national laboratory in the development of better fertilizers. Besides, the TVA has helped to plant millions of trees and maintains fire protection service over 92 per cent of the Valley forests. Its intensive malaria control programme on its reservoirs has played a major role in reducing malaria rates in the Valley almost to zero. TVA has thus become both a symbol and a practical example to peoples all over the world. Eighteen projects in the world today—15 under way and 3 planned—are based to a large extent on TVA experience and 18 others, although less comparable, have benefited by observation of TVA.⁶

Possibly inspired by the example of the TVA, some important multi-purpose river valley projects have been brought into existence in India during the period of the First Plan. The Bhakra-Nangal (Punjab and Rajasthan), Damodar Valley (West Bengal and Bihar), Hirakud (Orissa) and Tungabhadra (Andhra and Mysore) are some such projects. The following table gives the total cost of each project, the benefits anticipated during the Second Plan period and on completion of the projects. These

Name of Scheme	Total Cost Rs. in crores	Annual Benefits			
		Irrigation (in million acres)		Power (in '000 kW.)	
		During Second Plan period	On completion	During Second Plan period	On completion
Bhakra-Nangal	170.02*	2.026	3.604	546	594
Damodar Valley	105.38*	0.849	1.326	100	250
Hirakud	85.70*	1.023	2.207	123	123
Tungabhadra	60.34*	0.563	0.830	45	45
Total	421.46*	4.461	8.027	814	1,016

* Includes outlay on power portion.

Source: India, A Reference Annual, 1958, Ministry of Information and Broadcasting, Government of India, pp. 307 and 316.

projects are designed to serve the purposes of irrigation, flood control, power generation and navigation.

Lesson for India

India needs as a first measure a land utilisation survey which would be comprehensive enough to take into consideration problems

⁶ TVA: A National Asset, March 1955.

of soils and reclamation, development of irrigation, and water supply both for crops and men. On the basis of such a survey, it would be possible to adopt crop-planning with reference to the potentialities of each region and also to undertake, as conditions permit, engineering projects which would supply the varied needs of agriculture and rural life. It would not, indeed, be possible to adopt any such major plans for areas already intensively used; there would be a number of difficulties in the way, especially because of the small size of holdings and the density of the rural population. But, with reference to undeveloped regions, the scope for reconstruction work on a land utilisation survey would be immense.

ELECTRICAL ENGINEERING

That electricity has had a great civilising influence on life needs hardly to be stressed. It is a source not only of light but also of power. It can be used for domestic as well as industrial purposes. As a motive power for agricultural operations and for village industries, it can raise efficiency, increase earnings and thus improve the standard of living in the rural areas. It has been the settled policy of most Governments in the world to make electricity as cheap as possible and to extend its uses. In order to reduce the cost of generating electricity they have eliminated small uneconomic installations and introduced big power stations linked up in a grid so that wide areas can be reached and power supplied at a low cost. Taking the examples of countries with small farms, 95 per cent of farm families in France, 90 per cent in Japan and Germany, 85 per cent in Denmark and 100 per cent in Netherlands have been provided with central electric power station services.

Position: 1955-56

In India hardly any progress has been made in extending electrification to rural areas. The first attempt at rural electrification was made in the State of Mysore about the year 1929 followed by the Madras State in 1931. Uttar Pradesh was the next to come into the field. The grid system in that State supplied light to several villages and power was also used to run small flour mills and similar plants. In the Mysore State a planned effort was made to supply power for lift irrigation from wells. With the completion of the Pallivasal Project in 1940, the State of Travancore-Cochin (Kerala) came into the picture. To a still smaller extent

power is supplied to villages in some districts of Madras and the Punjab. On the whole electrically operated services are confined to large cities and towns. All towns with a population of 50,000 and over and most of those with a population of about 20,000 are supplied with electricity. No concerted efforts have been made to extend the use of electricity to the surrounding rural areas. Only 1 in about 200 villages is being served with electricity.

During the World War II period and after the attainment of Independence there has been a great demand for electricity in the States for agricultural uses, particularly for tube-well pumping. As a part of the Grow More Food campaign, pumping units were installed on rivers or wells. It was recognised that electric power would go a long way in the large-scale development of tube-wells, or lift irrigation from rivers. In 1948, about 35 per cent of the electric energy generated by the Ganga-Canal-Grid in U.P. (about 61 million kWh) was utilised for pumping of irrigation supplies with 2,200 tube-wells owned and operated by the States. In Madras and Mysore, irrigation pumping is mostly done from open wells and tanks. In 1949, there were about 12,500 of such consumers in Madras State alone and they took about 11.2 per cent of the energy sold by the public utilities. In Travancore-Cochin (Kerala), electricity is used for de-watering marshy lands. An idea of the growing importance of the use of electricity for agricultural uses can be had from the following statement.

CONSUMPTION OF ELECTRICITY FOR IRRIGATION AND
AGRICULTURAL DE-WATERING IN THE INDIAN UNION

Year						Consumption in million kWh for irrigation and agricultural de-watering
1939	..	..	..	..	..	64
1945	..	..	..	..	..	93
1947	..	..	..	..	..	125
1949	..	..	..	..	..	150

Source: Report on the First Five-Year Plan, Planning Commission, Government of India, 1952, p.346.

Government Policy

This unsatisfactory position in rural electrification is primarily due to lack of interest on the part of Government in developing electric power in this country. The treatment of electricity as a matter of public concern had passed through many vicissitudes. "The Government of India seem to have become aware of it for the first time in 1905 when a circular letter was issued by it to the Provincial Governments. Thereafter, both the Provincial Governments and the Central Government seem to have gone to bed. They woke up when the urgency of active interest in electricity was emphasised by the Report of the Indian Industrial Commission published in 1918 and the Report of the Indian Munitions Board which came out a year later."⁷ Even thereafter, no efforts were made to develop the power resources and a hydrographic survey that was undertaken in 1919 on the recommendation of the Industrial Commission was wound up in 1923 as it was found that the Act of 1919 did not permit the Central Government to spend its revenues on matters outside its field of administration. This is another illustration of the way in which the Reforms of 1919 worked to the disadvantage of Indian industrial and agricultural development. It is necessary that the Central Government should assume responsibility in this vital matter and chalk out a programme of power development for rural areas.

Grid System

It is true that the general poverty of the village makes any scheme of electrification of the country-side on a Western scale difficult in India. But this fact should not lead us to the other extreme of ruling out all possibilities of extending the use of electricity to the villages. Electricity can be utilised by the villagers both for agricultural operations and for rural crafts. There is also reason to think that if facilities are given to power concerns to extend their operations, electricity could be generated on a larger scale and supplied at a lower cost. According to the Munitions Board (1917), electrical transmission can be effectively extended upto 250 miles. The Royal Commission on Agriculture, though not optimistic about the development of electric power for agricultural machinery, admitted that the possibility of utilising

⁷ *Indian Information*, November 15, 1943.

electricity for the purpose of raising water from wells may make its use profitable in India even otherwise than as a mere surplus of power required for urban and industrial purposes.⁸ The cultivators in Gujarat, for instance, have installed hundreds of oil engines and pumps on wells for irrigation, and it would add to the efficiency of their operations if these were worked with electric power. An extensive use of electricity over a large area would make it possible to supply power at a low cost. This development is necessary as electric pumps are easier to operate than the oil engines; they give better service, depreciate less and prove more economical in the long run. New areas can be easily opened. The same power could be worked for lifting water for drinking purposes in villages and towns where sub-soil waters are deep and their drawing difficult.

In this connection a plan that was adopted in the former Baroda State deserves attention. The Government of former Baroda State permitted the power companies to extend electricity to rural areas and were prepared to finance them with a loan without interest to be returned in ten years by instalments if power was given for irrigation. The estimated cost of running a transmission line was Rs. 2,000 per mile in the pre-war period. The State had standardised electric motors and pumps which were leased out to villages on a rental or sold on an instalment system. The charges for power were fixed almost at the level of the generating cost. Unfortunately their larger scheme for a grid system could not be brought into operation owing to war conditions and the smaller stations could not work satisfactorily. Therefore, the scheme was kept in abeyance. In dry areas where flow irrigation schemes are not possible, one of the methods of extending this facility is by means of supplying cheap power for lift irrigation from wells, ordinary or tube. Under the existing system power cost except under a grid would be rather high, if not prohibitive, but the State can make it cheaper to the cultivator by giving subsidies to power companies. A little loss here would be more than compensated by the larger production of crops and their increased yields. It would be wrong to hold that the villager does not understand the advantages of electricity. There is noticeable a keen desire on the part of the people in the Charotar

⁸ Report, p. 363.

areas of Gujārat, for example, (even in small villages of 2,000 or so) to have electric current both for light and power though that may not be equally true of other parts of the country.

Hydro-electricity vs. Thermal Electricity

India's greatest need is to have cheap electricity both for agriculture and for industry. Under modern conditions, one need not have hydro-electrics. Powerful thermal stations provide power almost at the same rates as the hydros. The idea of having large hydro-electric projects only for the generation of electricity is being given up. Hydros cost almost four times as much as thermal sets in capital expenditure, the normal figures being Rs.800 and Rs.200 per kW. Again, hydro projects take two or three years to mature and even then there must be industries ready at hand to make use of the power generated at least to the extent of 30 to 40 per cent, while in the case of thermal stations, generation of power can be increased as the scope for consumption increases. Hydro sets are beneficial only when uses of the tail water can be found for irrigation, for which there is not always an unlimited field for expansion. The Government should encourage the installation of thermal stations at suitable places and cover the surrounding areas with a network of small stepping stations. As a preliminary step it is desirable to encourage people to take up licences for the supply of electricity in smaller areas even though they may have to put up small but costly installations. But later when the grid system comes into operation these sets may be replaced by bulk supply from the grid. These small units would open up areas quickly. At least that has been the experience in Baroda, where there were applications for licences even from small rural areas all over the State. That is the only way to take industries to the rural areas and avoid concentration in a few towns, as has happened so far. In India industries require dispersion, more so because cheap labour would be available locally or from nearby villages. It is only thus that we could supplement the meagre income from cultivation, cattle breeding or casual labour. This is one of the best methods of finding employment for the large number of unemployed and under-employed. For industries the initial cost of setting up steam or oil plants for the generation of power could be avoided. Electricity has many uses in the domestic life of the people especially

in running small dairy stations or a set of power looms or small machines like those for hosiery. Japan has made the fullest use of these facilities by installing small factories in rural areas. That the people in India too would readily take to the use of electric power can be seen from the fact that in Surat alone more than 5,000 looms, mostly owned by artisans, were operated by electricity.

Example of U.S.A.

In this connection it is interesting to note what the United States Federal Government have done to popularise the use of electricity on farms. Seeing that only 10 per cent of the farms were served by electricity, the Federal Government's Rural Electrification Administration started studying the question and evolved a scheme by which power companies were to be financed to extend their operations to rural areas. Without such assistance from Government, the companies were unwilling to extend their operations from a concentrated area of supply to unconnected and diffused receiving points. Under the Rural Electrification Act of 1936, self-liquidating loans for a period not exceeding 25 years could be granted to persons or institutions for the purpose of construction and operation of generating plants, transmission lines and distribution lines, for the supply of electric energy to persons in rural areas not receiving central station services. The Act also provides that loans may be granted for the building of required premises and the acquisition and installation of electrical and plumbing appliances and equipment. All loans bear interest, the rate for any year being the average rate of interest paid by the Federal Government on its obligations not maturing for 10 or more years and issued in the preceding year. The rate of interest thus charged comes to about 2·7 per cent. The Reconstruction Finance Corporation has been authorised to make advances from 40 to 100 million dollars a year. The Rural Electrification Administration has now been made a permanent body. The number of farms served by electricity increased from 10 per cent in 1930 to 90·8 per cent of the total in June, 1953.

Scope for Development

Experience in the post-war reconstruction schemes in rural areas has shown that given the necessary facilities the use of electric

power for agricultural operations would become popular. Government assistance should be in the shape of loans to enable them to have their premises fitted with electricity and to buy electric appliances for work now done by animal or manual labour. A scheme similar to that of the rural electrification administration of the U.S.A. will have to be introduced which will provide long-term loans to co-operatives for rural electrification and development. Rural electricity will also assist cottage industries which have been given priority in the Second Five-Year Plan. Even in 1942, it is estimated that about 12,000 power looms were operating under electricity in the villages of undivided India, of which more than half were in the then Bombay Province.

A special advantage in the encouragement of agricultural load is also that whereas the utilisation of 1 kW. power in industry requires an investment of Rs.3,000, the utilisation of 1 kW. of electric power in agriculture requires a much smaller capital of about Rs.1,200 per unit. Apart from this, most of the equipment required for the purpose can be produced in the country and its operation does not require the technical skill of high order. However, in the policy for rural electrification in the First and Second Plan periods, it has been laid down that in comparison with large urban areas, rural areas lack what is described as load density. In view of this the capital cost as well as the operational maintenance charges are held to be much higher. But on this there appears to be a difference of expert opinion. The most practicable approach given to the problem in the Plan is to undertake extension of power supply to villages which lie in proximity to town areas where power supply exists. Similarly, wherever possible, supply lines would be constructed from grid transmission plants to villages lying near their routes. Further, in the financial working of the schemes an integration of the urban and rural schemes is recommended so that the surplus revenue realised from urban and industrial consumers could be utilised for reducing rates to rural consumers.

On this approach, out of 585 medium and large towns with a population of 20,000 and above, 550 have been electrified by the end of the First Plan. In the next range of population, *viz.*, 10,000 to 20,000, only 350 were electrified out of a total of 856.

The remaining towns and small towns with a population of 10,000 and over are to be electrified during the Second Plan. This last stage of expansion of electricity to small towns will be the basis for the development of power for the adjoining rural areas. The main difficulty with regard to the electrification of the rural areas is that most of the villages are comparatively distant from developed power sources. It is estimated that the average cost of providing distribution lines and special station equipment would be Rs.60,000 to Rs.70,000 per village and if all the villages in the country are to be electrified, the capital outlay involved in the distribution lines alone would exceed Rs. 3,000 crores. Thus the programme of rural electrification is being taken on a phased basis with a total outlay of Rs.427 crores on power programmes during the Second Plan period, of which about Rs.75 crores will be spent on the electrification of small towns and villages.

Even in 1954-55 a scheme for the expansion of power facilities for providing employment opportunities in areas which were already electrified and where small and medium size industries were tending to grow had been introduced. Such extension of power is a policy visualised for the Community Project areas. The success in the implementation of the schemes would, however, depend on the co-operative effort of the people organised by the National Extension Services. Under the Second Plan, there is provision for extending power to over 10,000 villages. During the first two years of the Plan, 4,500 villages have been electrified. With an intensive co-operative drive more can be achieved with the existing financial provision.

Even at this rate of expansion of grid system it would take a very long period to cover the rural areas completely. Therefore, the only alternative method of increasing the tempo of power supply to rural areas is to undertake small hydro-electric stations in hilly areas or diesel installations in other areas where there is the scope for the utilisation of electricity for agriculture and small industries. The Council of Scientific and Industrial Research has also explored the possibility of developing and utilising wind power. In areas with fairly high wind velocities small working units could be installed. All such schemes could only be worked out with the co-operative efforts of the people and the financial

and technical assistance provided by State Governments. The design of the power station and distribution lines could be determined according to the availability and use of electricity in the area and these small units could be worked out on austerity standards for restricted hours without full provision for reserve capacity and with the utmost economy. In terms of population range of the number of towns and villages to be electrified by 1961, the prospect is that about 10,600 additional towns and villages of which 8,600 will have less than 5,000 population would be electrified. This would give an increase of 140 per cent over the present level. Still the percentage of the villages covered would be under two. The pattern of utilisation of power by different consumer groups will also show a gradual change. With the increased tempo of electrification, there will also be specific increase in the energy utilised for pumping water for irrigation purposes, which provides the main demand for power in rural areas. The Central Water and Power Commission holds the primary responsibility for co-ordinating the policy and programmes of the various State Governments and ensuring a high degree of technical, financial and administrative efficiency in the implementation of the programmes.

CHAPTER XII

AGRICULTURAL FINANCE

The provision of adequate credit to meet the short-term as well as long-term needs of the agriculturist for increasing the productivity of his operations and his income is at the core of the problem of reorganising Indian agriculture. The agriculturist himself has hardly a surplus which he can invest, and he has, as mentioned in earlier chapters, a load of past indebtedness to carry. The traditional source of finance is the village money-lender, and although some amount of Government finance is being made available and the co-operative movement has tried over the last fifty years to extend its operations, the total resources provided are inadequate. The problem is one not only of enlarging the supply of credit and of making it available on reasonable terms, but also of building up institutional agencies which take an integrated view of the requirements of the agriculturist and enable him to organise his operations on a proper economic basis.

The Rural Credit Survey organised by the Reserve Bank has examined this question in great detail, and has presented comprehensive reports on the subject. According to this Survey, the bulk of agricultural credit continues to be provided by the money-lender, some 45 per cent by professional money lenders, 25 per cent by agriculturist money-lenders and some 7 per cent by traders, landlords and commission agents. The share of Government comes to 3.3 per cent and that of co-operatives to 3.1 per cent of the total. It is proposed in this chapter to outline the role of Government and of money-lender in the provision of agricultural credit. The progress of the co-operative movement will be reviewed in the next chapter.

GOVERNMENT FINANCE FOR AGRICULTURE

Traditionally, Government assistance to the agriculturist has taken the form of '*taccavi*' loans—an ancient form of State help to enable the farmer to tide over emergencies such as flood or famine. Since the Second World War, loans and grants under

the Grow More Food campaign have assumed increasing importance, but, as might be expected, such Governmental finance is more in the nature of special assistance than an integral part of the normal methods of financing agriculture.

Regular assistance by Government to finance the emergent needs of the agriculturist on a regular basis dates back to the Land Improvement Loans Act of 1883 and the Agriculturists' Loans Act of 1884. Both these Acts were passed on the recommendation of the Famine Commission of 1880. The Land Improvement Loans Act is intended to provide long-term loans for effecting permanent improvements in agriculture. The maximum period of repayment is fixed at 35 years, though, in practice, the period has been restricted usually to 20 years. The rate of interest charged is fixed in relation to the rate at which public loans can be floated. In the pre-war years, the total amount disbursed under the Land Improvement Loans Act was estimated at about Rs.35 lakhs per year for the whole of undivided India.

Under the Agriculturists' Loans Act, short-term loans are granted for current agricultural needs such as purchase of seed, manure, cattle and implements. The rate of interest charged is fairly low. Loans are to be repaid usually at the next main harvest or after two main harvests. Though the operation of this Act was not intended to be confined necessarily to relief of distress, in practice, the loans granted have been devoted mainly to meeting such needs.

An important question which arose in connection with the administration of these two Acts was whether taccavi loans were to be granted for repayment of past debts. Some of the State Governments have made loans for this purpose. But, the problem of rural indebtedness is obviously too big to be solved in this manner. In any case, total amounts made available have been quite small, the total for undivided India in the pre-war period being about Rs.95 lakhs on an average per year. Apart from this overall inadequacy, there have been various complaints regarding the administration of these loans. The rate of interest, for example, is usually around $6\frac{1}{4}$ per cent. But the cultivator has to go to circle offices, taluka offices and even district offices in order

to get his application accepted, and, if possible, promptly. All this adds up to the net cost of borrowing. The revenue agency which is in charge of the administration of these loans is not equipped to deal with the task of assessing credit requirements or of supervising the use of this credit when granted. There have also been complaints as to a lack of co-ordination between the different departments concerned with the operation of the system. Some loans are given by the revenue department, some by the department of agriculture and some, of course, by the co-operative movement.

In recent years, especially since the commencement of the First Five-Year Plan, there has been a substantial step-up in the finance provided by Government to the agriculturists by way of taccavi and other loans. The following table indicates the volume of such advances and recoveries year by year, together with the net disbursements made by the State Governments since 1948-49.

LOANS AND ADVANCES TO AGRICULTURISTS
1948-49 to 1957-58

(In crores of rupees)

Year	Advances	Recoveries	Disbursements
1948-49	11.1	3.7	7.4
1949-50	15.5	5.3	10.2
1950-51	14.0	7.6	6.4
1951-52	17.1	8.5	8.6
1952-53	20.7	10.4	10.3
1953-54	21.0	12.4	8.6
1954-55	25.5	12.8	12.7
1955-56	33.1	14.6	18.5
1956-57	32.8	21.2	11.6
1957-58	21.5	21.4	0.1

The total outstandings of these loans and advances as at the end of 1956-57 amounted to some Rs.100 crores. This includes some outstandings from years prior to 1948-49.

In spite of this increase in the quantum of assistance by Government, the total resources provided are still inadequate in relation to needs. Further as the Rural Credit Survey points out the benefits of this assistance does not reach the small farmer. According to the data collected by the Rural Credit Survey, the all-India average for borrowings of cultivators from Government was about 3 per cent of their total borrowings in 1952-53. The average borrowing per family of big cultivators was Rs.24 while for the small cultivators it averaged Rs.3. The average borrowing for medium cultivators was between Rs.6 and Rs.14 per family. Altogether the large cultivators who constituted about 30 per cent of the total accounted for nearly 60 per cent of the borrowings from Government. In contrast, the share of the small cultivators who formed 30 per cent of the total number of cultivators was only 10 per cent of the total borrowings. A part of the explanation for this uneven distribution of Government assistance lies in the fact that loans for improvement are normally sought by the comparatively well-to-do cultivators. In part, this disparity arises from the normal practice followed of insisting on collateral security for such loans. Such security can be offered only by the large landholders.

The three kinds of securities against which loans are sanctioned are :-

- (a) The borrower's interest in the land to be improved;
- (b) Collateral security of other lands belonging to the borrower, or the surety offered by other persons to support the claims of the borrower;
- (c) Joint security of the village community or a group of cultivators; in practice, a great deal of importance is attached to the ratio of the loans granted to the value of the collateral pledge. The proportion of loans thus secured was about 100 per cent in Hyderabad, 99 per

cent in Mysore, 97 per cent in Bombay, 95 per cent in Vindhya Pradesh, 89 per cent in Madras, 79 per cent in Madhya Pradesh and 75 per cent in the Punjab.

The Grow More Food Enquiry Committee which reported in 1952 also referred to the undue emphasis on property as a basis for security and observed that taccavi loans for sinking wells could not be availed of by the smaller landholders and tenants in many cases for lack of land or other security to offer. Complaints have also arisen in connection with the system of entrusting to local committees the distribution of taccavi in kind. Such local committees often represent the upper classes and landholding interests in the village.

Mention may finally be made in this connection to a number of schemes for different States for the rehabilitation of displaced persons. Considerable financial assistance to agriculture is provided under these schemes, especially in the Punjab, West Bengal and Assam.

Altogether the system of financial assistance by Government to the agriculturists meets only a fraction of the needs of the rural community. The system is defectively administered and the arrangements for supervision and co-ordination are inadequate. In some cases, there is duplication and over-financing and no attempt has been made to link up the assistance provided by Government with the finance available from other agencies such as the co-operative movement. It is for all these reasons that the system has not been a success as a *general* means of financing agricultural improvements, although it has been of assistance in a limited way to particular types of agriculturists and in emergencies like famines or other calamities.

MONEY-LENDER FINANCE

We may turn now to the private financing agencies in the field of agriculture. Apart from commercial banks, which supply only about 1 per cent of the total borrowings of cultivators, these comprise professional money-lenders, agricultural money-lenders, relatives, traders and landlords. The investigations made by the Rural Credit Survey showed that as much as 90 per

cent of the total credit available to cultivators came from these sources. Loans from relatives constituted 14 per cent of the total borrowings reported. These loans are interest-free and may be regarded as a special category. Some 6 per cent of the total borrowings of cultivators was from traders and commission agents; these, again, are not loans so much as advance instalments of the purchase price, and often carry no interest. Professional money-lenders supply about 45 per cent and agricultural money lenders about 25 per cent of the total credit available. As the Rural Credit Survey sums up the situation : "Among creditors the money-lender, and among money-lenders the professional money-lender, dominates rural credit."

The dominant role of the money-lender and his various devices to extort the maximum from his debtors have been the subject of much comment and discussion. But, it must not be forgotten that the money-lender adapted his practices to the needs of the situation; his terms and conditions were 'flexible' even if onerous; he was always ready at hand, and, after all, a member of the rural community. An effective substitute for the money-lender has yet to be discovered; neither Governmental finance, nor co-operative finance have so far provided these other facilities which matter a great deal to the farmer.

The fact that the money-lender was the only source of finance at a time when the economy was being more and more monetized reduced the agriculturist to a position of sheer dependence. Money-lender finance was expensive in terms of the rate of interest, and the agriculturists' need for cash went on increasing. Since land was almost the only security which the agriculturist could offer, his failure to pay meant, in due course, alienation of his land and hence loss of his means of livelihood. The increasing volume of land transfers from the middle of the 19th century onwards led to peasant uprisings in several parts of the country, and Government had thereafter to regulate money-lending and scale down rural debt.

RESTRICTIONS ON TRANSFER OF LAND

For several reasons, the land values were rising rapidly since the advent of British rule in India. For instance, at the time of

the annexation of the Punjab, the average value of an acre of land in the Province was six times the land revenue; in 1938-39, it was 283 times. The money-lenders therefore willingly and freely advanced loans to the agriculturist, got him into the coils of debt, forced him to offer a mortgage as security and, finally, resorted to foreclosing. With the passing of the Registration of Documents Act (1864) and the Transfer of Property Act (1882), the law came to the aid of the money-lender in expropriating the cultivator all over India. By 1874, in the Punjab alone, a million acres were mortgaged and by 1891 the figure had gone up to 4 million acres. The money was advanced on such hard terms that the mortgages generally ended in sale. Thus the Famine Commission of 1880 recorded the evidence of Sir A. Mackenzie, the Chief Commissioner of the Central Provinces, that in every district through which he had marched he was beset by "unfortunate men anxious to spread before him their little bundle of decrees, for many times their original loan, then sale and after that, the heart-breaking hunting of the camps and footsteps of the higher officials who can do nothing but send the petitioner away as he came." In the Punjab, between 1875 and 1893, the money-lenders acquired 1,179,000 acres in different parts of the Province and in the single district of Gujranwala they purchased over half the land sold during the period.¹ This evil of mortgage debt and alienation of land soon assumed vast proportions and the agrarian discontent found expression in several peasant risings in Bombay, Bengal, Oudh, Ajmer and other parts of the country.

DECCAN AGRICULTURISTS' RELIEF ACT

In Bombay, agrarian discontent led, in 1875, to an uprising of a large number of people in 45 villages in the Poona district and in 22 villages in the Ahmednagar district against the money-lending classes who were forced to surrender the bonds and other securities which were burnt in the open. As a result of the recommendation of the Commission appointed to inquire into the riots, the Government passed the Deccan Agriculturists' Relief Act in 1879 for restricting alienation of land and restraint of usury. This Act authorised the Courts to examine the history of the farmer's debt in suits against him, to make an estimate of the sum actually

1 M. L. Darling: *The Punjab Peasant in Prosperity and Debt*, p. 233.

due and to withhold unreasonable rates of interest. It protected the debtor from arrest and from sale of land unless it was definitely pledged. It also provided for the restoration of lands to the debtor under certain circumstances even if there was a sale deed between the debtor and the creditor. An agriculturist owing more than Rs.50 could be declared insolvent on application. The Act also provided for the appointment of debt conciliators. The Amendment Act of 1882 provided for the redemption of debts before the due date mentioned in the bond and empowered debtors to sue for accounts without seeking the redemption of mortgaged lands.

A Commission appointed in 1892 to enquire into the working of the Act reported that conciliation had only been misused in favour of the creditor. The Government adopted one amendment after another to cure the Act of its defects but the provisions were evaded by the creditors by over-writing the bonds or by acquiring the lands under different forms of sub-leases so as to avoid the risk of these being interpreted by the Courts as mortgages. The results of the Act were so disappointing that another Commission in 1912 as also the Bombay Banking Enquiry Committee recommended its repeal and its replacement by a new Act.

No action was taken in the rest of India until 1895 when after consideration of the report on the Deccan Agriculturists' Relief Act, the Government of India addressed Local Governments and suggested that some restriction on the alienation of land was desirable. As a result, the Punjab Land Alienation Act of 1900, the Bundelkhand Land Alienation Act of 1903 (U.P.), the N.W.F.P. Land Alienation Act of 1904 and the Central Provinces Land Alienation Act of 1916 came to be passed. In general, these Acts laid down that land mortgages to members of the non-agricultural class could remain in force only for a limited number of years, whereafter the lands were to be returned to the mortgagor free from all encumbrances. In the Punjab, the mortgagor could redeem his lands at any time during the currency of the mortgage, by depositing a certain proportion of the debt as the Deputy Commissioner may determine to be equitable, provided the mortgage was in the form permitted by the Land Alienation Act. In order, therefore, to facilitate the redemption of other mortgages by sum-

mary procedure, the Redemption of Mortgages Act was passed in 1913. This Act empowered the Collector, on petition by the mortgagor, to summon the parties to attempt to arrive at a settlement and to order redemption if he was satisfied that the mortgagor had paid the mortgagee a proper sum on account of debt. Under the Punjab Restitution of Mortgaged Lands Act (1938), a mortgagor can present, subject to certain conditions, a petition to the Collector praying for redemption of land mortgaged prior to 8th June 1901.

These measures, however, failed in their main object, particularly for the reason that the law permitted the transfer of land from the debtor to a money-lender if he was an "agriculturist." Nor were *benāmi* transactions uncommon in which a professional money-lender got the land mortgaged in favour of another agriculturist and received the rent through him. Indeed, as foreseen by one of the members of the Select Committee on the Punjab Bill, there appeared "monster fishes in the agricultural community. . . encouraged by law to swallow smaller fishes." The Land Alienation Act was thus increasingly availed of by the landlord to add to his acres at the expense of the peasantry. The benefit of the Punjab Redemption of Mortgages Act was also limited, as the operation of the Act was restricted to mortgages the principal sum secured under which did not exceed Rs.1,000 whatever the area of land mortgaged, or to mortgages of land not exceeding thirty acres in area.

That the law failed even in the Punjab, the pioneer Province to pass the Act, is an indication that the measure was not sufficiently comprehensive. It could not stop the evil of alienation of land nor the growth of rural debts. In fact the area under mortgage increased even during the pre-depression years though the contrary ought to have been the case, as more credit could be then raised by mortgaging less lands. After the depression, the mortgaged area further increased while the amount raised thereon declined as is seen from the following table.²

² Report on the Land Revenue Administration, Punjab, 1938-39, Statement No. XXVII.

Average of 5 years					Total area mortgaged by agriculturists	Mortgage money per rupee of revenue of area mortgaged	
						Acres	Rs.
1902-1906 (Average of 4 years only)	..					1,89,810	62
1906-1911		2,39,608	83
1911-1916		2,65,274	86
1916-1921		2,59,826	108
1921-1926		2,94,458	128
1926-1931		2,98,013	116
1931-1936		3,27,835	84

Between 1891 and 1921, the amount of the mortgage debt of the Province increased by as much as Rs.25 crores. In the following decade a burden of another Rs.31 crores was added. In 1931, only 17 per cent of the landowners were free from debt, the average debt per indebted proprietor in that year being Rs.600 as against Rs.463 in 1919. The total debt of proprietors was about Rs.120 crores or twenty-two times and a half the land revenue, and representing at least a year's gross income of those supported by agriculture, or between 5 and 6 years' net income.³

The situation in other provinces in the pre-British period was not far different from that in the Punjab. The following figures for some of the provinces given by the Banking Enquiry Committee show that even mortgage debts had come to bear a large proportion in the total indebtedness of the people.⁴

3 Cf. M. L. Darling: *The Punjab Peasant in Prosperity and Debt*, pp. 9-10.

4 In 1938, two Acts were passed in the Punjab to amend the Land Alienation Act. One of these amending Acts enabled the Deputy Commissioner to determine finally whether any person was to be deemed to be a member of an agricultural tribe for the purpose of the Act, and to set aside "benami" transfers intended to evade the provisions of the Act. The other amending Act was intended to check the permanent alienation of land to agriculturist money-lenders by their debtors, with a view to placing the former class for the purposes of the Punjab Alienation of Land Act in the same category as non-agriculturists in the matter of permanent alienation of land by agriculturists.

Province	Total indebtedness (Rs. in crores)	Percentage of mortgage debt to total agricul- tural debt
U. P.	124	56
Madras	150	50
Bengal	100	45
Punjab	135	43
Bihar and Orissa	155	40
Bombay	81	28-36
C. P. and Berar	36½	27½

The Royal Commission on Agriculture recommended the passing of Land Alienation Acts in all States. But this was not implemented.

REGULATION OF MONEY-LENDING

The need for regulating the money-lender's business was emphasised by the Royal Commission on Agriculture which commended the principles underlying the Punjab Regulation of Accounts Act, 1930, and the British Money-lenders' Act of 1927 to the consideration of the Provincial Governments.⁵ The Conference of representatives of Provincial Governments called in 1934 decided that the matter should be left to the discretion of the local authorities. Since that year, almost every Province passed laws to regulate the maintenance of accounts by the money-lender. These laws, though not uniform, generally provide for the maintenance of proper registers of transactions by the money-lender showing the amount of each debtor separately, to supply the debtor, periodically or on his requisition, with a statement of accounts in respect of each transaction and showing him the outstanding amount of principal and interest and to issue receipts. Failure to comply with these regulations makes the creditor liable to the loss of interest (wholly or in part) found due, as also of

⁵ Report, para. 366.

costs of suits for the recovery of arrears. In the Punjab, the penalty is dismissal of the suit, whereas in Assam, Bihar, Orissa, Bombay and the U.P., the entry of a fictitious amount in excess of the actual amount loaned out has been made an offence punishable with a fine.

These Acts, however, have not been successful, for the main reason that the debtor himself is not in a position to plead the fact of his not having been supplied with accounts or receipts. Again, whenever the debtor has had recourse to courts, his own ignorance has made it difficult for him to prove his claims.

REGULATION OF INTEREST

The early laws which authorised the courts to pass decrees sanctioning the rates agreed to in the contract gave a stimulus to usurious practices which had already come into vogue after the disintegration of the rural community. When attempts were made to check them by having certain provisions in the Deccan Agriculturists' Relief Act and some of the Land Alienation Acts to that effect, the money-lender started over-writing the bonds and under-writing repayments. So, in 1918, the Usurious Loans Act was passed to protect the debtors against hard and unconscionable bargains by authorising the court to reopen, of its own motion, old transactions and to settle the terms equitably. But the Act was soon found wanting as it was to apply only in suits by creditors for the recovery of their dues. A debtor could get the benefit of the Act only by driving the creditor to the court by refusing to repay a loan. This Act, however, was amended in 1926 so as to enable the debtors to have recourse to law for relief. It was found thereafter that even this new Act was limited in its scope as the courts could not give any retrospective effect to its provisions and could reopen accounts only when several conditions were fulfilled.

The Central Banking Enquiry Committee made valuable suggestions for rectifying these defects by adding some new provisions so as to make the new Act really effective. In the post-depression period, nearly every province carried out this recommendation either by further amending the Usurious Loans Act or by including the necessary provisions in other Acts governing money-lending

or debt relief. Generally, the new provisions made it incumbent on the courts to reopen past transactions and to award interest at certain prescribed rates. In most of the provinces a distinction was made between secured and unsecured loans, the former having a lower rate of interest, while in some of the provinces compound interest was forbidden. Table I gives the maximum rates of interest chargeable under the several Acts providing for the regulation of interest.

In the U.P., the arrangement is more elastic as it is provided that the Government will notify from time to time the interest rate in consonance with the money market conditions in relation to loans prior to the Agriculturists' Relief Act of 1934, while on loans subsequent to the Act, the rate of interest varied according to the amount of the loan, being lower the larger the amount.

In most of the States (Assam, Bengal, Bihar, Madhya Pradesh, Madras, the Punjab and Uttar Pradesh) reduction in payment towards accumulated interest was provided by adopting the rule of *Damdupat*. Under this principle, in Madras, a debtor need not pay anything more towards the debt when he has paid twice the principal of the loan. In several other States, the payment of a sum greater than the principal towards the arrears of interest is prohibited.

TABLE I
MAXIMUM RATES OF INTEREST ALLOWED

State	Relevant Act	Simple interest per cent per annum		Compound interest per cent per annum
		Secured Loans	Unsecured Loans	
Assam	The Assam Money-lenders' Amendment Act, 1943 (Sec. 4).	9½	12½	Prohibited
Bihar	The Bihar Money-lenders Act (Sec. 9 and 10).	9	12	Prohibited
Bombay	The Bombay Money-lenders Act (Sec. 25).*	9	12	—
Madhya Pradesh	Usurious Loans Act, 1918.	12	18	10

* This Act as amended in 1951 provides that the State Government may from time to time by notification fix the maximum rates of interest for any local areas or class of business of money-lending in respect of secured and unsecured loans. The rates given here are in force from 5th July, 1952.

State	Relevant Act	Simple interest per cent per annum		Compound interest per cent per annum
		Secured Loans	Unsecured Loans	
Madras	The Madras Agriculturists Act, 1938 (Sec. 13).	6½	6½	—
Orissa	The Orissa Money-lenders Act (Sec. 9).	9	* 12	—
Punjab	The Punjab Relief of Indebtedness (Amendment) Act, 1940.	7½ or 2 per cent. above the bank rate whichever is higher.	12½	—
Uttar Pradesh†	The United Provinces Debt Redemption Act 1940 (Sec. 9 (2)).	4½	6	—
West Bengal	The Bengal Money-lenders Act, 1939 (Sec. 30).	8	10	—
Pepsu	The Patiala Relief of Indebtedness Act, 1939 Svt. (Sec. 5 (2) (e)).	7½ or 2 per cent above the bank rate whichever is higher.	12½	—
Hyderabad	The Hyderabad Money-lenders Act 1349 F. (Sec. 10).	6	9	Prohibited
Mysore	The Mysore Money-lenders Act, 1939 (Sec. 14).	9	12	6
Travancore-Cochin	Travancore Civil Procedure Code Regulation 1100 ME.	12	—	—
	Cochin Usurious Loans Act, 1111 ME. (Sec. 3 (2) (e)).	12	—	—
Ajmer	The Bombay Money-lenders Act, 1946 (Sec. 25).	9	12	—
Coorg	The Coorg Money-lenders Act, 1937 (Sec. 8).	7½	12	Prohibited
Himachal Pradesh	Himachal Pradesh Debt Reduction Act, 1953 (Sec. 8 (2)).	6	12	—

† In case of agriculturists and workmen only.

Source: Agricultural Legislation in India, Vol. I—Regulation of Money-Lending, Directorate of Economics and Statistics, Government of India, 1956. pp. vii-viii.

REGISTRATION AND LICENSING OF MONEY-LENDERS

As it was found that evasion of law by the money-lenders was possible because few cases came before the courts, most of the States (Madhya Pradesh, the Punjab, Bihar, Bengal, Bombay and Uttar Pradesh) sought to locate the money-lenders by making registration and licensing compulsory for them. Those money-lenders who did not hold any registration certificate were either debarred from having recourse to courts of law for the recovery of their dues or they were made liable to severe penalties. Yet, the working of this Act, for example, in the Punjab has had some surprising results. Only a small number of money-lenders—9,206 out of about 55,000 in the Province—registered themselves in 1939. This is presumably due to the money-lenders' realising the futility of going to court in view of the new agrarian relief legislation. Nevertheless, these provisions for registration and licensing, if effective, would greatly facilitate the growth of organised rural banking and enforcement of rules of business and audit under the supervision of the financing banks. But the definition of the term "money-lender" is not always sufficiently comprehensive to cover all the money-lenders. Moreover, a number of loans (such as loans to traders, small loans on equated payments, kind loans carrying a certain rate of interest) have been excluded from the operation of these Acts. As a result, the sifting of the various kinds of loans for applying the Act to such of them as come under it becomes an extremely complicated task and provides a way of escape for many an ingenious money-lender.

MORATORIUM

The world depression of 1929 which impoverished most of the cultivators necessitated, in addition to regulating the business of money-lending, some measures of relief to the agriculturist debtors. Being weighed down by a crushing load of debt, it was impossible for them to get even a subsistence income from their lands when agricultural prices had fallen almost to half. The Provincial Governments therefore tried to devise measures of immediate and speedy relief. The earliest means adopted was of granting a moratorium to prevent the rush of suits and wholesale execution of decrees during the period of formulation of debt relief measures.

Early in 1932, the Government of Uttar Pradesh notified that the execution of decrees in cases in which the civil court had

ordered agricultural lands to be sold should be transferred to the Collector who was also authorised to adjourn all sales where the price offered was unfair. In 1933, this measure was reinforced by another notification laying down the conditions determining the fair price. As a result, about 48,000 decrees were held up while the Debt Relief Act was being discussed. So, in 1934, the Encumbered Estates Act was passed staying suits and proceedings in courts in respect of debts of landholders who had applied to the Collector for a composition of their debts while the Temporary Regulation of Executions provided for staying the execution of proceedings against judgment-debtors and for enabling the debtor to pay off the debt in instalments. With a view to extending this relief to tenants and small holders, another Act was passed in 1937; all pending and fresh applications for the execution of decrees as also proceedings were stayed in respect of agriculturists paying a land revenue less than Rs.1,000 and who were not assessed to income-tax. All agricultural debtors in civil prisons were released and further arrest and detention of agriculturists in execution of decrees were prohibited. Those who paid a land revenue or rent of Rs.250, however, were required to deposit one-fifth of the amount of the executed decree before getting stay orders.

In Madras, the Government introduced a Moratorium Bill in October, 1937, but replaced it by a Debt Relief Act in March, 1938, which invalidated the proceedings taken by courts between the date of the Moratorium Bill and the passing of the Debt Relief Act. It also provided for revision of the decreed amounts on application of the judgment-debtor. Where sale of land had already taken place, the debtor could re-acquire the land by refunding payment, provided the judgment-debtor applied to the court within 90 days of the commencement of the Act. Any alienation of immovable property made by a debtor during this period was also declared invalid.

In the Madhya Pradesh, Government issued instructions in 1933 and 1934 that the sale of land should be restricted only to unavoidable cases. Instructions were also issued to the courts that crops and cattle should be attached only after exempting the seed grain, cattle and the produce and fodder necessary for the cultivator and his cattle till the next harvest. In 1938, an Act was

passed declaring a moratorium on the lines of the Act in Uttar Pradesh.

In Bombay, the Government passed, in 1938, the Small Holders' Temporary Relief Act enabling the agricultural debtors to secure protection and the tenants their tenancy rights by staying execution of decrees on debtors' properties and by prohibiting eviction by landlords. The Act was to remain in force for one year. Under this Act, only those who held lands not exceeding 6 acres of irrigated or 18 acres of unirrigated land or holders of any kind of land which was assessed at or below Rs.30 were termed small holders and thus got protection. The staying of proceedings pending or instituted for the sale of land was made conditional on payment of interest on the sum for which the land was to be sold. For the rest, the Act was more or less on the lines of the U.P. Act. Eviction of the tenant was prohibited in cases where he had paid his rent for the year ending 30th June 1938. If the landlord was granted any suspension of land revenue, relief in the same proportion was to be given to the tenant in respect of his payment of rent and interest.

In the remaining former provinces, the Debt Relief Acts provided for staying proceedings in suits and decrees on the application by the debtors for conciliation of debts and thus indirectly granted a moratorium in respect of their loans. The moratorium thereafter varied with the length of time taken by the Conciliation Boards to settle the debts.

CONCILIATION OF DEBTS

With a view to bringing about amicable settlement of debts, Debt Conciliation Acts were passed in the Madhya Pradesh (1933), the Punjab (1934), Assam (1935), Bengal, Madras (1936) and in some of the Indian States. Under these Acts, Conciliation Boards came to be set up for adjusting the available assets of the debtors to the total debts and facilitating repayment in a reasonable number of instalments. Such a reduction in debt was permitted only when creditors to whom 40 per cent (in the case of Madras) of the debts were owed agreed to an amicable settlement. Creditors who refused to agree to the Board's decision were placed under certain disabilities in recovering their dues (e.g., disallowance of costs

of suit and simple interest in excess of 6 per cent) while the claims of those who accepted it were given priority. The jurisdiction of the Boards was generally one or two taluks. Facilities were granted to the creditors to realise the instalment amounts through the Revenue Officers so as to induce them to join in an agreement. In Bengal, the awards were made negotiable by providing that the right to receive any amount payable under an award could be assigned in the manner prescribed in the Act.⁶

The working of these Boards brought considerable relief to the cultivators. In the Punjab, during the year ending 31st December, 1940, the Conciliation Boards disposed of nearly 26,000 applications involving Rs.2.46 lakhs; the debts which were actually admitted amounted to Rs.91.45 lakhs of which the debtors agreed to pay Rs.35.85 lakhs. Debts admitted on creditors' application only amounted to Rs.14.42 lakhs of which the debtors agreed to pay Rs.4.19 lakhs. In Madras, a total of Rs.508 lakhs was reduced to Rs.265 lakhs during the 28 months ending June, 1940. Between 1938 and 1950, only a little more than Rs.10 crores of debt or about 4 per cent of the indebtedness could be scaled down, benefiting hardly 5 per cent of the total number of agriculturists.⁷ In Bengal, during 1937-38, debts amounting to about Rs.5 crores were scaled down all over the Province. The amount of debt disposed of till 1945 represented only 18.9 per cent of the total rural indebtedness in the State. In the Uttar Pradesh, till 1945-46, the amount dealt with was Rs.7.1 crores, which formed 29.6 per cent of the total debts.⁸

Defects in Working

The exclusion of certain classes of debts under these Acts has restricted the scope of benefit. Thus, for example, rent debts, co-operative debts, debts due to banks, trade debts and debts due to Government are partially or totally excluded from many of the Acts, or they are included in the Acts subject to certain difficult conditions. The inability of the illiterate debtor to give the names of some of his creditors makes conciliation of many debts difficult,

6 Cf. K. G. Sivaswamy: *Legislative Protection and Relief of Agriculturist Debtors in India*, p. 266.

7 *Ibid.*, p. 307.

8 Reserve Bank of India, *Monthly Bulletin*, February, 1949, p. 69.

since it would be unfair to cancel the debts of creditors to whom no notice has been served. Fraudulent practices such as false transfers and bogus mortgage deeds hamper settlement of debts but many of the Conciliation Acts do not empower the Boards to dismiss such applications. In most of the Acts there is no provision to settle the debts of an individual debtor in case of joint debts unless all the debtors apply for settlement.

As a result, applications from debtors who are a party to joint debts have failed to receive consideration from the Boards. Where the Board tries to decide the validity of disputed debts, its labour is wasted because its decision is not made binding. Applicants are also rejected by the Board for reasons such as extreme attachment of the debtor to his land and his unwillingness to come to a settlement with his creditors when it involves transfer of land; unwillingness of creditors to conciliate debts due to them where they hold decrees of foreclosure or lands under interminable usufructuary mortgage; over-indebtedness of the debtors; debtors owing heavy arrears of rent or revenue; debts supported by defective documents, etc. Corruption and inefficiency of the Boards have also been detected in some cases. It is thus reported of Bengal that these Boards consisted mostly of persons whose literary attainments went little beyond ability to sign their names. It is too much to expect such members to solve "intricate questions of law. . . that often tax the intelligence and baffle the judgement of experienced judges and lawyers."⁹ Lack of a sufficiently large number of Boards has often, as in Bengal, led to a sudden increase in proceedings against debtors in those areas where the Boards were not instituted. As a result of these factors the scope of conciliation has been limited.

COMPULSORY SCALING DOWN OF DEBTS

The scope of amicable settlement being limited, relief was further sought to be given to the agriculturists through compulsory reduction in the claims of the creditors. Madras was the first Province to give such ready relief to debtors by passing the Madras Debt Relief Act of 1938. Firstly, it prohibited the creditor from recovering in the aggregate more than twice the original loan;

⁹ See K.G. Sivaswamy: *Op. cit.*, p. 302.

where repayments were less than twice the sum borrowed, only the balance was to be paid. All arrears of interest outstanding on 1st October, 1937, on debts incurred before the 1st October, 1932, were cancelled and only the principal was deemed payable. Interest on debts incurred on or after the 1st October, 1932, could not exceed 5 per cent till the 31st October, 1937, whereas interest on all decrees from the latter date was laid down at $6\frac{1}{4}$ per cent. Tenants were also given relief by wiping out all arrears of rent except those of the two years preceding the Act, provided these latter were paid by September, 1939. Sales of movable or immovable property could be set aside if made in execution of a decree after the 1st October, 1937. The Act conferred considerable benefits on the agriculturists inasmuch as by September, 1941, more than 168,000 cases had been disposed of involving Rs.6.52 crores of debts which were reduced to Rs.3.46 lakhs. In the Madhya Pradesh, the Debt Relief Act passed in 1939 replaced Debt Conciliation Boards by Debt Relief Courts which were authorised to give graded relief to the debtors in respect of their dues, on the basis of fall in prices since the depression. The principal of debts prior to 31st December, 1925, was to be reduced by 30 per cent, of those incurred between that date and 31st December, 1929, by 20 per cent while those between the last date and 31st December, 1931, by 15 per cent. Debts incurred subsequently were not provided relief. The payment of interest could not exceed 6 per cent simple interest on secured loans and 9 per cent on unsecured loans while the payment of compound interest was limited to $4\frac{1}{2}$ per cent with yearly rests.

The U.P. Agriculturists Debt Relief Act of 1939 laid down that loans taken before the Act came into force should carry a certain scheduled rate of interest from 1st January, 1930, till such date as might be fixed by the local Government. Any judgment-debtor whose decree was not executed could apply for revision. The excess paid under interest was to be credited to the principal. Interest on subsequent decrees was not to exceed the rate at which the local Government borrowed. The Act authorised the courts to award by way of the principal amount due, a sum which would not exceed twice the amount of the principal minus all the payments received by the creditor in the past in respect of the said transactions. The landed property of protected tenants could not be sold away to

realise their dues, but creditors could take possession of it as a usufructuary mortgage.¹⁰

The Bombay Agricultural Debtors' Relief Act, 1939, was put into force in 1941 as an experimental measure in a few talukas in the three divisions of the former Province. It provided that every debt, in respect of which no application for settlement was made within one year from the date on which a Board was established, would be deemed to have been duly discharged. The specially constituted Debt Adjustment Boards working under the control of the civil courts were authorised to compel the creditors to accept scaled down debts. They also settled the subsequent arrangements for the repayment of the adjusted amount in instalments convenient to the debtor. As in the U.P. and Madhya Pradesh, the Act made provision for graded relief. The account regarding the principal was to be separate from that of interest, accumulated interest not being allowed to be debited to the account of the principal. The rule of *Damdapat* was also adopted for reducing the debt. A procedure was laid down for the Boards to estimate the debtor's ability to repay his dues and the principal could be scaled down to 80 per cent of this repaying capacity. Where creditors agreed to scale down the total claims to 50 per cent of the assets of the debtor, they could be paid down the amounts in the form of bonds issued to them by the State Land Mortgage Bank. Otherwise, they could recover the scaled down debts in instalments not exceeding 25 in number. Where the assets of a debtor were found inadequate for repayment, the Board could declare him an insolvent.¹¹

In general the element of compulsion has not always proved to be a better alternative to amicable settlement. For instance, while the reduction provided by the Debt Relief Act in the Madhya Pradesh varied between 10 and 30 per cent, the average remission secured by the Debt Conciliation Act, according to the Government review on the working of the Boards was 54 per cent of the demand, the highest being as much as 64 per cent in some individual cases.

10 Re-enacted as the U.P. Debt Redemption Act, 1948 ; The U. P. Regulation of Agricultural Credit Act, 1940, re-enacted in 1948.

11 Re-enacted as the Bombay Money-Lenders' Act, 1946, and amended in 1948, 1949 and 1951.

OTHER MEASURES

In addition to debt relief, attention is given to the necessity of exempting a portion of the debtor's property from attachment and sale and the protection of the debtor from intimidation and molestation by the creditor for the recovery of his dues. One aspect of this problem of indebtedness, however, that remains to be urgently tackled is that of insolvent agricultural debtors. Where ancestral debts have been for years disabling the farmer even from profitably continuing his occupation, debt conciliation is an inadequate relief. While in Europe restrictions are placed on the recovery of ancestral debts to the extent of the property inherited, there is no corresponding measure passed in India for the relief of the debtors. To such cultivators, who are beyond any hope of being rehabilitated, insolvency provisions are the only remedy. The case for a simple Insolvency Act for such farmers has found support from several Commissions and Committees in the past—including the Royal Commission on Agriculture, the Civil Justice Committee and the Indian Central Banking Enquiry Committee. "Just as creditors have the right to insist that all the debtors' assets should be impounded and applied towards the payment of the debts, so also the debtor who has given up all his assets should have the clear right to be allowed to earn his living if he can and to be free to make a new start in life."¹² In this connection, the investigation of the Bengal Board of Economic Enquiry (1935) into the position of tenants with special reference to their indebtedness is illuminating. It showed that of the 635 families examined, 13 per cent of the debtors were indebted to the extent of more than 4 times their annual income while others whose holdings were below 2 acres were 20 per cent of the total debtors. Thus, on the whole, about 33 per cent of the total number of tenants were not in a position to get out of their indebtedness and, therefore, could save themselves only by resorting to insolvency provisions.

But as the Insolvency Act of 1920 was intended only for debtors whose debts amounted to more than Rs.500 and as the courts also generally disallowed the benefit of the Act to landholders whose rights were protected from sale in execution, it was not very helpful to cultivators. The Royal Commission on Agriculture had, therefore, recommended amendment of the Insolvency Act enabling

¹² Report of the Royal Commission on Agriculture in India, p. 441.

the debtors whose debts were less than Rs.500 to have recourse to this Act. This recommendation was given effect to by the Governments of some States. In Bengal, insolvency provisions were embodied in the Agricultural Debtors' Act of 1936.¹³ In other States which did not adopt similar provisions, the creditors failed to get expeditiously the maximum repayments possible while the debtors, weighed down by past debts, were unable to make a new start in life.

A simple rural Insolvency Act enabling the debtor to surrender all his assets to the creditors excepting a subsistence holding to earn his living would meet the situation, if, indeed, the debtor had a subsistence holding to start with. There is no reason to fear that such a provision would bring in a wholesale resort to insolvency. In fact, experience in Madhya Pradesh showed that these provisions were followed by a reduction in the number of insolvency petitions from 1,766 in 1936 to 1,070 in 1937, the latter being only a little more than one-fourth of that for 1930. Unless such help is given to the large number of hopelessly insolvent debtors in rural areas, the other alternative is, as the Royal Commission on Agriculture observed, "to witness a continuation of a system under which innumerable people are born in debt, live in debt and die in debt, passing on their burden to those that follow."

LIMITATIONS OF DEBT LEGISLATION

The main provisions of the legislative enactments in the States comprise (1) the licensing and registration of money-lenders, (2) maintenance of accounts in the prescribed forms, (3) furnishing of receipts and periodical statement of accounts to debtors, (4) fixing of maximum rates of interest, (5) protection of debtors from molestation and intimidation and (6) penalties for violation of the provisions. The Acts are neither equally comprehensive nor uniform in scope. In Madras, Assam and Coorg there were no provisions for either registration or licensing. The Punjab Act excluded protection in case of substantial mortgage or sale of immovable properties. The Bengal Act excluded all commercial loans. The Madras Act excluded advances made by the landlord to his tenant, by a lessor to his lessee or by one person in cultivation

¹³ Re-enacted as the Bengal Money-Lender's Act, 1940.

or co-sharer to another. The Orissa Act did not exclude the loans advanced by the scheduled or commercial banks, but where the capital advanced did not exceed Rs.1,000, the transaction was not considered as money-lending for the purposes of the Act.

Effects of Debt Legislation

It now remains to consider whether the legislation for debt relief and control of money-lending has adequately solved the problem of rural indebtedness. There is no doubt that one of the most significant events of the depression, in this context, was the enactment in a large number of States of debt relief legislation. But the data, however meagre, on the working of the various Acts in the post-depression period until the beginning of World War II show that in practically none of the States did such legislation succeed in making any noticeable impression on the general level of indebtedness. The immediate effect of these measures had been a contraction of credit. The latter was also partly due to the economic depression which affected the money-lending profession (by freezing the assets of those who were both agriculturists and money-lenders) in areas where such legislation was in force. The money-lenders discontinued lending except to old and trusted clients and restricted their loans to a minimum.¹⁴

In most of the States the main drawback of these relief measures was that the State did not come to the help of the farmer in repaying his dues to the creditor. It is mainly for this reason that many debtors became defaulters even in respect of their scaled down debts while in some States like the Punjab, many a cultivator refused to repay his debts to co-operative societies and the *taccavi* dues to governments. While it is not denied that some defaults in so far as they were wilful reflect the demoralising effects of the agrarian relief legislation, it is equally true that the major cause of default is the debtors' inability to pay. The measures therefore cannot be said to have had no value at all. In a number of cases they did succeed in achieving what was probably the main objective, *i.e.*, to give the agriculturists some breathing time to enable them to settle claims made upon them by their creditors. Since the proceedings against the cultivators who came under this Act were

¹⁴ Statutory Report of the Agricultural Credit Department, Reserve Bank of India, Para 11.

stayed until disposal, the overall effect of the legislation was to restrain the creditors from taking out suits against debtors, though it must be said that the Act did not bring under its purview a large section of the agricultural population. However, apart from this, the effect of these measures on the level of indebtedness in the various States was generally unimpressive.

On principle, it is recognised that debtors should repay all legitimate dues to the fullest extent. Where it is impossible for the debtor to do so, he may be assisted by government. In the former princely State of Bhavnagar, for example, the government based its scheme of debt redemption on the principle that the maximum amount annually repayable by an agriculturist debtor should not exceed three times the annual assessment payable by him. The State, thereafter, undertook to help the debtors to repay their dues. The total amount to be advanced by the State for this purpose in respect of each village, however, was not to exceed one-fourth of the nominal arrears outstanding in the books of accounts of the money-lender. This advance was recovered from the agriculturist at 4 per cent per annum along with the annual assessment. To save them from again falling into debt, the government undertook several constructive measures to improve the economic conditions of the farmers. They also granted liberal remissions of arrears of land revenue.

But the dominating factor of the debt situation between 1931-39, *i.e.*, after relief measures were introduced, was probably the inability of the cultivator to repay the principal amounts of old debts in most cases and default even in the repayment of interest charges to a certain extent. This incapacity of the debtor does not seem to have been removed by any direct assistance or indirect financial aid by Government. Actually, though fresh borrowing during the period appeared to have been reduced to a minimum, the level of debt which under the circumstances was broadly a function of accumulated interest on the one hand and forced liquidation of debts by sales and foreclosures on the other, did rise with an expansion in the monetary burden of agricultural debt.¹⁵

¹⁵ The ^{increase} in indebtedness has been discussed in Chapter III, pp. 93-97.

The Rural Credit Survey has come to the conclusion that the law has been powerless against the money-lender. The control sought to be exercised on him by the legislative enactments has had little effect on him or his operations beyond putting him to the necessity of devising a variety of legal camouflage for a whole range of illegality.¹⁶ Even the regulation of the rate of interest on the loans of money-lenders to agriculturist borrowers under the Deccan Agriculturists' Relief Act did not, in practice, have any effect as there was no alternative or supplementary organised arrangement for the supply of credit at reasonable interest or at the ceiling interest fixed by the law to the cultivators. At least such a substitute arrangement would by effective competition compel the money-lender to bring down his interest rates, but such organisations did not exist except for co-operative credit societies in certain areas. The measures taken by government were relatively minor and almost insignificant in relation to the total credit needs. Even the expansion of the facilities for cash remittances through the establishment of a large number of banking currency chests initiated by the Reserve Bank in conjunction with the programme for the extension of the branches of the Imperial Bank (now State Bank), could not by themselves, or in conjunction with other measures adopted by State governments, help to provide adequate credit as an alternative to that supplied by the money-lenders. It is because of the undiminished demand for credit on the part of the agriculturist population that the money-lender has been enabled to successfully evade the controls imposed on him and to continue to supply agricultural credit as extensively and extortionately as ever. The data on rates of interest by themselves are sufficient to indicate the general evasion of legal regulations throughout the country. The borrowings at rates higher than the legal maximum exceeded 60 per cent of the total borrowings from the agencies in Bihar, Orissa, West Bengal, Hyderabad, Madras, Madhya Pradesh and Pepsu.¹⁷

The main criticism that can be levelled against these laws is that they are inadequate in themselves to tackle the evil of indebtedness. They are at best corrective and not preventive. The

¹⁶ Report of the Committee of Direction, All-India Rural Credit Survey, Vol. II, General Report, p. 326.

¹⁷ *Op. cit.*, Vol. I, Part II, p. 702.

money-lender's dealings may be regulated, and debts may be conciliated or scaled down, but they are bound to reappear so long as the occupation of farming itself cannot give the cultivator sufficient means to subsist. With the help of these measures the farmer may recover part of his lost ground but he cannot hold it for long, unless efforts are simultaneously made to rehabilitate agriculture and to transform it from a deficit to a profitable basis, through comprehensive agricultural reforms.

As the Report of the Rural Credit Survey has pointed out the preponderating participation of the money-lender in agricultural finance and the size of his operation are an index to the size of the effort that will be needed on the part of the State to rectify a chronic mal-adjustment which is to the disadvantage of rural India. Until other sources of supply, particularly of co-operative credit, are organised, the money-lender is likely to elude the law for regulation and control of his operations.¹⁸

In the scheme of integrated rural credit recommended by the All-India Rural Credit Survey and accepted by Government, no place has been assigned to the private money-lenders. The Report observes : "it is certainly obvious that the money-lenders can be allotted no part in the scheme, important or significant, notwithstanding their dominance which today is overwhelming . . . Thus it would be a complete reversal of the policies we have been advocating to give him a position in the co-operative banking structure when the whole object of attempting to develop and strengthen the structure is to provide a positive institutional alternative to the money-lender himself, something which will compete with him, remove him from the forefront and put him in his place." In fact the recommendation goes so far as to provide safeguarding measures for preventing the money-lender from getting into the co-operative society and using it for his benefit. It is also made clear that this recommendation is made not on the ground of any anti-social element in the transactions of the money-lenders but on the ground that the present malpractices of the money-lender are made possible by the absence of strong

¹⁸ See, for a fuller discussion of the problem, the Report of the Rural Credit Survey, Vol. II, p. 328 and Chapter 41.

institutional competition. When such competition is organised it is even hoped that the money-lender's usefulness will predominate over the less useful and more undesirable features of his present dominance. In this light, the Rural Credit Survey Committee recommend that the scheme of control over the money-lender's activities should be more realistic than the prevailing schemes of control in the different States. Only under a proper scheme will the better type of money-lender have a chance to perform his functions without having recourse to the evasion of law. The Report approves of the need for a review of money-lending legislation in different States, on the lines of the scheme of control proposed by the Agricultural Finance Sub-Committee. Among the main proposals in the above scheme it is suggested that the rates of interest prescribed in the different legislative measures should be reviewed and revised in a realistic manner. It is obviously futile to expect the money-lender to charge an interest which is lower than that prescribed as the maximum for co-operative societies and other institutions. There is the need for a proper agency for the enforcement of the provisions of the Acts by providing for the necessary staff under the Registrar of Co-operative Societies.

In regard to the traders who combine money-lending with their other activities, it is suggested that with the development of co-operative marketing societies, and when a network of godowns and warehouses is created, the necessary healthy institutional competition in traders' operations will have evolved which will curb their harmful practices. The trader, like the money-lender, will fall into a place not within the official scheme itself but in a role supplementary to it providing useful services to the producer. The provision of warehousing and storage facilities would also help the commercial banks to lend substantially on agricultural commodities and create agricultural bills which will be negotiable and which the Reserve Bank can re-discount under Section 17(4) (d) of its Act. Finally, the Report of the Rural Credit Survey visualises a period when by the development of the scheme of integrated rural credit as advocated, the 'rural debentures' of the land mortgage banks, which would be set up as a countrywide feature of credit organisation, would be an effective and attractive means of canalising the savings of the people of means in

rural areas, especially big cultivators and also the money-lenders. This will in reality mean that to the extent there is such a diversion of saving, the agriculturist money-lender and professional money-lender instead of doing their own lending for purposes not necessarily productive and to persons not necessarily prompt in repayment will be lending to an institutional agency which can ensure both productiveness of purpose and promptness of repayment. This is the possible point of contact which the Committee has viewed between the money-lender and the integrated scheme of Rural Credit.¹⁹

¹⁹ See Report, *Op. cit.*, p. 485.

CHAPTER XIII

THE ROLE OF CO-OPERATION

The co-operative movement has been recognised in India as the most important institutional source of credit. It is organised on a federal pattern with the primary credit societies at the base of the movement, federated into Unions or Central (District) Co-operative Banks and, the latter again into an Apex (State) Bank, functioning for a whole State. These societies and banks provide, in the main, short-term and to some extent medium-term credits. The provision of long-term credit is sought to be canalised through the primary land mortgage banks and the central (State) land mortgage banks which have been developed in some of the States.

At the end of June, 1957, there were 23 apex (State) co-operative banks, 451 co-operative central banks and 1,61,510 agricultural credit societies with a total membership of 9.1 million. All these institutions operated in 1956-57 with a total owned funds of Rs.60.54 crores, deposits of Rs.104.92 crores and working capital of about Rs.288.10 crores. The quantum of fresh advances by agricultural credit societies was Rs.67.33 crores. In comparison, the institutions for financing long-term credit operated on a very modest scale. There were only 12 central and 326 primary land mortgage banks with a total working capital of about Rs.34.02 crores.

In recent years greater attention has been paid to the development of non-credit organisations but so far the impression made by these organisations has not been significant. The number of State non-credit societies was 56 at the end of June, 1957 with a membership of 7,869 individuals and 7,775 societies. The sales during the period amounted to Rs.14.52 crores, more or less the same turnover of the previous year. The central non-credit

societies numbered 2,947 and had a membership of 20.49 lakh individuals and 74,024 societies. They sold, as owners and agents, goods worth Rs.71.46 crores. There were 31,905 primary non-credit societies with a membership of 27.58 lakhs and a working capital of Rs.44.73 crores. The sales amounted to Rs.43.96 crores. In the sphere of agricultural development, the irrigation societies showed encouraging results in the period of the First Five-Year Plan. There were 1,409 irrigation societies, 257 land colonisation societies and 1,701 co-operative farming societies in 1955-56. There were also 4,643 health and better living societies almost entirely in rural areas.

The following statement shows the development of the Co-operative Movement in India.¹

Average for 5 years	No. of societies (in thousands)	No. of members (in lakhs)	Working capital (in Rs. crores)
1910-11 — 1914-15 ..	11.79	11.29	5.48
1915-16 — 1919-20 ..	28.5	11.29	15.18
1920-21 — 1924-25 ..	57.70	21.55	36.36
1925-26 — 1929-30 ..	93.94	36.89	74.89
1930-31 — 1934-35 ..	105.70	43.22	94.61
1935-36 — 1939-40 ..	116.96	50.77	104.68
1940-41 — 1944-45 ..	149.89	72.18	124.35
1945-46 — 1949-50 ..	159.18	107.32	188.73
1950-51 — 1954-55 ..	194.83	146.05	330.32
1955-56 ..	240.39	176.22	468.82
1956-57 ..	244.77	193.73	567.67

Of the total number of societies in 1956-57, 201 thousand were agricultural (including primary land mortgage banks and grain banks) and the rest were non-agricultural. The average number of societies per one lakh inhabitants came to 62.4 and the working capital amounted to Rs.14 per head of population.

¹ Statistical Statements relating to the Co-operative Movement in India, 1956-57, Reserve Bank of India, pp. 2-3 and 50.

Members of the primary societies formed 5 per cent of the total population or for every 1,000 inhabitants there were 49.4 members.

Progress of the Movement

The operations of the societies formed under the Act of 1904 were restricted only to credit. The scope of the movement was widened with the passing of the Co-operative Societies Act in 1912, which permitted organisation of non-credit societies as well as of central banks and provincial banks. The publication of the Report of the MacLagan Committee on Co-operation in 1915 containing far-reaching proposals for the further development of the movement, the transfer under the Government of India Act, 1919, of Co-operation to the control of Provincial Governments in the transferred departments and the rapid expansion of the movement till 1929 marked the further stages in the development of the co-operative movement. With the onset of depression since 1929, the movement, however, received a serious setback. Due to the fall in prices of crops, the burden of debt became accentuated and the dues of co-operative societies became frozen. This also affected the working of financing agencies adversely. The popular Ministries that came into power in 1937 were not slow to realise the magnitude of the problem. Co-operative inquiries were conducted in several Provinces and the former princely States and proposals for rehabilitating the movement were formulated. In some of the former provinces, such as the C. P. and Berar and Bihar, the debts of the members of societies were scaled down on the basis of their paying capacity and repayment spread over a number of years. Government gave financial assistance to the provincial banks in order to enable them to carry out these schemes. Other measures such as the passing of debt legislation, establishment of conciliation boards, etc., were adopted in order to alleviate the burden of debt of the farmers. After the outbreak of the war in 1939, the prices of agricultural produce marked a substantial rise with the result that the value of land as well as the income from land went up. In those Provinces where the co-operative movement was in a comparatively healthier condition and where measures for the rehabilitation of the movement were well in progress even before the outbreak of war, a slight improvement was noticeable. The overdue in agricultural societies in India came

down from Rs.11.15 crores in 1938-39 to Rs.4.09 crores in 1946-47. Agricultural societies in Madras, Bombay, Bihar, Orissa, U.P., Mysore, Baroda, Travancore and Cochin accounted for the fall in overdues to the extent of Rs.2.82 crores during the period. Overdues in the case of land mortgage banks too decreased from Rs.11.60 lakhs in 1938-39 to Rs.3.38 lakhs in 1946-47, even though their outstandings increased from Rs.2.74 crores to Rs.3.58 crores during the period.

However, there was a reversal of the trend in the position of overdues in agricultural societies and primary land mortgage banks since 1947-48. The overdues in agricultural societies increased from Rs.4.12 crores in 1947-48 to Rs.17.92 crores in 1956-57 or more than threefold during the period. Barring the three years, 1948-49 to 1950-51, the proportion of overdues to outstandings in agricultural societies has shown an uptrend during the period 1947-48 to 1956-57, and reached a peak of 28.6 per cent in 1954-55. This should be viewed against the declining trend in the recoveries of loans from individuals during the same period. The proportion of loans repaid to fresh advances showed a decline of about 6 per cent over the period. In the case of land mortgage banks, overdues increased from Rs.3.19 lakhs to Rs.29.83 lakhs or more than eight times for the corresponding period and their outstandings stood at a high of Rs.11.51 crores in June, 1957 or increased by a little less than threefold during the same period. There seems to be little cause to suppose that larger advances will lead to improved recoveries.²

The subsequent progress of the co-operative movement indicates that only a small sector of the rural society benefited from the rise in war-time prices, and that "the main effect of the increase in agricultural prices has been to improve the repaying capacity of the borrower and not so much to reduce his need for fresh finance which on the other hand has risen with the cost of cultivation and maintenance."³ However, during the war period as well as the post-war period, the co-operative movement may be said to have entered a period of consolidation with a new pattern of development in multipurpose societies.

² See also Sir Malcolm Darling's Report on Certain Aspects of Co-operative Movement in India, Government of India, New Delhi, 1957, pp. 5-8.

³ Review of the Co-operative Movement in India, 1939-1946, Reserve Bank of India.

AGRICULTURAL CREDIT SOCIETIES

The primary societies, credit and non-credit, agricultural and non-agricultural, form the base of the structure of the co-operative movement. The agricultural societies far outnumber the non-agricultural societies, as can be expected from the predominantly agricultural character of the country. Among agricultural societies, credit societies outnumber non-credit societies. Thus, at the end of 1956-57 there were in all 201,932 agricultural societies (including grain banks), of which 161,510 or 80 per cent were credit societies. The total number of members of all agricultural societies was 129·71 lakhs and their aggregate working capital Rs.158·40 crores. Of this, the share capital amounted to Rs.34·84 crores and the reserve fund and other funds to Rs.21·85 crores. In the agricultural credit societies alone, the working capital was Rs.98·30 crores, share capital Rs.19·83 crores, reserve fund Rs.8·28 crores and other funds Rs.5·18 crores. The members' and non-members' deposits amounted to Rs.4·64 crores and Rs.2·54 crores respectively, while loans from State and central banks amounted to Rs.55·90 crores. The owned funds as represented by share capital, reserve fund and other funds came to 33·8 per cent of the working capital (share capital 20·2 per cent, reserve fund 8·4 per cent and other funds 5·2 per cent). The members' deposits were 4·7 per cent and the non-members' deposits formed about 2·6 per cent. Loans from the provincial and central banks formed about 56·8 per cent of the working capital. On a superficial view, the figures may not indicate an unsatisfactory position. However, on closer examination, it will be found that reserve funds in most of the cases are illusory, in the sense that they have been created without making any provision for bad debts or writing off bad debts from time to time. Even share capital in many cases represents deductions from loans. Obviously, the movement has failed to inspire confidence among non-members so as to attract their deposits which have been progressively going down.

Lack of Thrift

A more fundamental defect noticed is that the element of thrift in the movement is small compared with that in many European countries and that societies rely too much for their

finance on their financing agencies. At the end of 1956-57 the societies held loans of Rs.56·94 crores against deposits of Rs.8·05 crores. They had loans of Rs.76·82 crores outstanding, of which loans amounting to Rs.16·82 crores or 22 per cent were in arrears. The position in some States would appear to be much worse, apart from the fact that the system of calculating overdues varied from State to State and that the above figures do not include overdue interest which, as judged from the present position of the movement, must amount to a large sum, though the accurate figures for it are not available. During war-time due to the rise in prices of agricultural produce and of lands, distinct signs of improvement were noticeable in several States, particularly in Madras, Bombay and Mysore.

However, the position regarding outstanding and overdues did not show a continuous trend of improvement. Even in the advanced States of Bombay, Madras and Andhra, the percentage of overdues to outstandings stood at 24, 13 and 18·6 respectively though a large part of such overdues was of short duration which should be considered as a feature of improvement. The States where chronic overdues were a legacy of the past were West Bengal (62·2 per cent), Bihar (51 per cent), Mysore (29 per cent) and Orissa (28 per cent). Although the fresh advances made by the primaries reached a record figure of Rs.67·32 crores during 1956-57, they constituted only about 9 per cent of the annual estimated credit requirements of the cultivators. The fact that in several cases fresh finance was the result merely of renewal of old loans should also be considered as a factor in determining the satisfactory operation of the primary societies.

Period of Loans

Loans were generally advanced for a period of one year which indicates the essentially short-term nature of the advances of the primary credit societies. However, in the States of Madras, Uttar Pradesh, and Orissa and to a fair extent in Bombay, Andhra, Madhya Pradesh and Punjab, loans were issued for medium-term purposes for a period ranging from one to three years. Loans exceeding three years were also heavy in Madras and to a fair extent in Andhra and Madhya Pradesh. There was great demand for medium-term loans but this could

not be satisfied from the available sources of the societies alone (owned funds and medium-term borrowings). The amendment to the Reserve Bank of India Act for the provision of loans for medium-term purposes and the efforts made by the State Governments towards the disbursement of Rs.25 crores per year for medium-term agricultural loans, laid down as the target in the First Five-Year Plan helped the process of enlarging the sphere of medium-term credit.

Purposes of Loans

From the analysis of the loans according to the purposes for which they were sanctioned, the bulk of the advances are shown as having been utilised for production purposes, *viz.*, cultivation purposes. The purchase of land or cattle as well as marketing have not figured prominently among the purposes for which loans were sanctioned.

Security

There was general reliance on land as security for advances. In Bombay, Saurashtra and Madhya Pradesh, loans were made either on the mortgage of lands or on the strength of declarations made under certain special sections of the respective Co-operative Societies' Acts creating a compulsory charge on the land owned by the borrower. In Uttar Pradesh, the Punjab, Himachal Pradesh, Delhi and Rajasthan, loans were issued on the personal security of one or more members. In Madras, Andhra, Orissa, Coorg (Mysore) and Kerala, loans were advanced to varying extents on securities such as jewels, deposits, immovable properties, etc., though the bulk of the advances were made on personal security. The standing crops have not been recognised as an exclusive form of security in any State. But Bombay has worked out a scheme, with some success, of 'crop loans' on the basis of outlay on crops (the cost of production per acre) and the time of repayments is adjusted to the harvesting season. The amount loaned is to be repaid out of the sale of the anticipated crops but even in this case the security for such loans would continue to be either the mortgage on the land or the declaration creating a charge on the land under Section 24-AA of the Co-operative Societies Act in the State. When the co-operative credit movement in the Bombay State was reorganised with a view to providing short-term finance to all 'credit-worthy' agriculturists

in the State, the principle of financing on the basis of the requirements of production rather than the assets has assumed new significance. The system of 'crop loans' has received greater emphasis and has been found to be more effective among the societies where commercial crops like sugarcane, cotton or potato are financed and where the marketing organisations are efficient. There has been a rise in loan operations after the shift from land to crop as the basis of credit. In Bombay State, since the introduction of the crop loan system in 1950, loans made to members by the agricultural credit societies have increased from Rs.7.2 crores in 1950-51 to Rs.15.58 crores in 1955-56.⁴

Rates of Interest

There is no uniformity in the rates of interest charged by the primary credit societies. They continue to be high in Uttar Pradesh, Madhya Pradesh, Assam, Pepsu (Punjab), Himachal Pradesh and Ajmer (Rajasthan), where the rates vary from 9 to 12 per cent. Efforts are, however, being made to reduce the lending rates in these States. In areas where funds from the Reserve Bank have been utilised to an appreciable extent, the general rate has been reduced. In West Bengal the rate has been reduced from $12\frac{1}{2}$ per cent in 1951-52 to $7\frac{1}{2}$ per cent. Similarly in Hyderabad (Andhra), there was a reduction from $9\frac{3}{8}$ per cent to $7\frac{1}{8}$ per cent. In Uttar Pradesh, the rate of interest charged to the ultimate borrower was reduced from 9 per cent to $8\frac{1}{4}$ per cent in July, 1956. In Assam, under a new scheme called the Credit Stabilisation Scheme, introduced in 1954, the rate is to be brought down to 8 per cent. Madras, Andhra and Travancore-Cochin (Kerala) are the States where comparatively lower rates of interest varying from 6 to 8 per cent are charged. In Bombay the usual lending rate is $7\frac{1}{8}$ per cent.

Soundness of Societies

The audit classification of the primary societies should give a clear index of the efficiency in the working of these societies. It appears that except in Coorg (Mysore), Bombay and Rajasthan, the percentage of "A" class societies in other States was inconsiderable and was less than 10 per cent of the total. The position was slightly better in regard to "B" class societies which formed

⁴ Bombay State Co-operative Bank : Report of Crop Loan Evaluation Committee, Part I, 1958, p. 24.

more than 10 per cent in as many as ten States. The bulk of the societies is classified under "C". The percentage of such societies at the close of 1955-56 has been as high as 85 in Madhya Pradesh, 79 in Madras, 74 in Andhra and 67 in Orissa. In Assam and Jammu and Kashmir "D" class ("E" class in West Bengal) formed a sizable proportion. Even more unsatisfactory is the large percentage of societies which remained unaudited and unclassified in some States. The percentage of unclassified societies was as high as 62 in Pepsu (Punjab), 47 in Jammu and Kashmir, 45 in Uttar Pradesh and 39 in Madhya Bharat (Madhya Pradesh). The position regarding liquidation appears to be still worse. At the close of 1956-57, there were 13,960 societies in liquidation consisting of 96 central institutions, 8,117 primary agricultural societies, and 5,211 non-agricultural societies. The number of primaries in liquidation was high at 1,866 and 1,399 in Bombay and Madhya Pradesh, respectively. Possibly, the position would appear still worse if the fact that in several States a large number of societies are not taken into liquidation even if they have ceased to function for a number of years, is considered. The percentage of societies that have gone into liquidation since the beginning of the movement has appreciably risen and exceeds 25.

CENTRAL BANKS

The central banks form an important link in the financial structure of the co-operative movement. They have been organised since the passing of the Co-operative Societies Act of 1912 to finance the primary societies and to act as their balancing centres. There are two types of central banks; the first having a membership confined to societies known as banking unions and the second having a mixed membership of individuals as well as societies.

The area of operation of central banks varied widely from a taluka or *tehsil* in some States to a district in others. Central banks in Bombay, Madras and Madhya Pradesh operate over comparatively large areas, while in Bengal, Bihar, Orissa and the Punjab, their activities are confined to smaller areas. In Bombay and Madras, central banks have branch offices in order to maintain close contact with the affiliated societies and to make available banking facilities in smaller towns. Central banks, particularly in Bombay and Madras, do other banking business

such as accepting of deposits of various types—current, fixed, savings; collecting bills, cheques, hundies, dividend warrants and railway receipts; issuing drafts and hundies, safe custody of valuables, purchase and sale of securities and advancing loans at times to individuals against fixed deposits, government paper, gold, silver and agricultural produce. Central banks in Bombay have developed large commercial business particularly of advancing loans against agricultural produce, and to facilitate the development of this business several of them have introduced the system of nominal membership for their clients.

There were 451 central banks with membership of 146,681 individuals and 163,874 societies at the end of the year 1956-57. Their working capital amounted to Rs.110·26 crores, reserve and other funds Rs.7·34 crores, deposits from societies and individuals Rs.56·29 crores, loans from provincial banks Rs.27·54 crores and loans from Government Rs.5·2 crores. The borrowed funds amounted to Rs.91·81 crores and formed 83·2 per cent of the working capital. Loans outstanding at the end of the year from individuals amounted to Rs.3·86 crores, while those from societies amounted to Rs.68·04 crores. These figures show that 78·3 per cent of the borrowed funds of the central banks have been given out in the form of loans. They also indicate that taken as a whole, the banks work on a very low scale of fluid resources. The position of overdues in respect of principal or interest separately are not available. However, the record has not been very happy. Of the amount of loans due from individuals and from banks and societies totalling Rs.71·90 crores, the percentage of overdues was 21·4 in respect of individuals and 12·5 in respect of banks and societies. The total bad and doubtful debts amounted to Rs.1·41 crores and constituted 15 per cent of overdues. In the course of examination where loans are not fully secured, more security is demanded, certain concessions are granted to the debtors such as reduction in the rate of interest, or in several cases, waiving of interest, and facilities for repayment of loans in instalments. Bad debts are to be written off from the owned funds (paid-up capital and reserves) of the societies. In Madhya Pradesh and Bihar, rehabilitation schemes were brought into effect whereby examination in respect of every loan has been conducted, the debts from members have been scaled

down according to their paying capacity and loans have been made repayable in instalments spread over a number of years not exceeding 20. The losses are first to be written off from the owned funds of the central banks and the creditors are to be paid *pro rata*. The Co-operative Societies' Act was amended in Bihar and Madhya Pradesh in order to facilitate compromise between central banks and their creditors. Arrangements were brought about between several central banks and their creditors in these States. The central banks in Bombay, Madras and the Punjab (and to some extent in the Uttar Pradesh) were in a healthier condition, while the condition of central banks in Madhya Pradesh, Orissa, Bengal and Assam was disquieting. Many of them had to close their doors on account of their inability to meet the claim of their creditors. •

Main Features in Working

The prominent feature of the structure of central co-operative banks and banking unions is the excessive number of these units. The average number of societies affiliated to each central bank is thus often too small to admit of adequate business. The average number of affiliated societies for central banks varied between 767 in Madras, 665 in Kerala, 533 in Uttar Pradesh, 501 in Andhra, 488 in Orissa, 312 in Madhya Pradesh, 310 in Bihar, 305 in Bombay, 294 in Punjab and West Bengal and 116 in Assam. This factor also contributed to the very weak capital structure of the central bank in a large number of States. However, there has been an improvement in the capital structure owing to the amalgamation and reorganisation of central banks into strong ones in some States in 1956-57. The average share capital for central banks was less than Rs.1 lakh only in Assam, Bihar, Jammu and Kashmir and West Bengal. Only Bombay, Mysore, Andhra, Madras and Kerala showed a higher average at Rs.4.60 lakhs, Rs.4.76 lakhs, Rs.5.55 lakhs, Rs.6.97 lakhs and Rs.8.60 lakhs respectively at the end of 1956-57. In Assam, Bihar, Jammu and Kashmir, Rajasthan and West Bengal, the average owned funds per bank were less than the standard of Rs.3 lakhs indicated as the required minimum by the Standing Advisory Committee on Agricultural Credit of the Reserve Bank of India. Only in six States, namely, Andhra, Bombay, Kerala, Madras, Mysore and Orissa did the average working capital per central

bank conform to the standards of minimum working capital suggested by the above Committee, *viz.*, Rs.20 to 25 lakhs. The bulk of the deposits in the majority of the States was contributed by sources other than co-operatives. Out of the total deposits of Rs.58.48 crores as much as Rs.39.37 crores or 67.3 per cent were contributed by individuals and other sources.

Another unsatisfactory feature noticed in the working of the banks is the combination of the activities of trading and banking (as in the case of apex banks), which should be kept distinct. The Agricultural Credit Organisation Committee, Bombay, referred to this "growing indifference of some of these institutions to the needs and the view point of the village primaries and the propensity of doing business with traders and individual borrowers in preference to co-operatives." This tendency was ascribed by the Committee to the preponderance of urban elements in the directorates of the banks. Though this practice is waning in the scheme of reorganisation, the central banks in some of the States still continue to undertake trading activities. In Bombay, only one central bank undertook the work of distribution in iron, cement, foodgrains, yarn, sugar, cotton seed, etc. In Bihar, the central banks have given up all trading activities except the distribution of fertilisers and textbooks. In Pepsu (Punjab), only one bank undertook the distribution of fertilisers to a limited extent. In West Bengal some of the banks continued the distribution of goods to a limited extent but official instructions were issued to them to put an end to non-credit activities. The central banks in Andhra, Madras, Rajasthan, Uttar Pradesh and Orissa did not undertake trading activities.

The emergency conditions of the war period and the post-war transition period may have justified the central banks undertaking non-credit activities, particularly in the distribution of commodities, but with the policy of decontrol of foodgrains and other commodities the central banks should cease trading in commodities in a peace-time economy. Even the experience of these banks has not been happy and should warrant a correction of the defect; some of them have suffered serious losses in these ventures with the result that (a) in many States the proportion of overdues was very high. It was 61 per cent in West Bengal, 45 per cent in Bihar, 22 per cent in Rajasthan, 19 per cent in Orissa, 17 per cent in Bombay,

16 per cent in Uttar Pradesh and 15·6 per cent in Punjab ; (b) in some, the bad and doubtful debts were appreciably of a high order and exceeded the reserve for the purpose. In addition, the central banks employed staff who were ill-equipped for the nature of these functions to be performed and the strength was inadequate for the volume of the business transacted.

STATE CO-OPERATIVE BANKS

The State co-operative banks occupy a very important position in the financial structure of the co-operative movement. The MacLagan Committee strongly recommended the organisation of provincial co-operative banks in each of the major Provinces in order to co-ordinate and control the working of central banks, forecast and arrange for the provincial requirements as a whole and be the financial co-operative centre of the Province. But the process of establishing State co-operative banks has been gradual. In the post-war period the need for reorganising the co-operative movement, particularly in the backward areas on an agreed pattern so that the Reserve Bank of India can under Section 17 of the Act provide credit facilities to the movement was recognised. Therefore, steps were initiated by the Reserve Bank towards the organisation of the apex co-operative banks where such institutions did not exist before or the reorganisation and strengthening of existing ones wherever these were called for. Following the territorial readjustment and integration effected under the States Reorganisation Act, 1956, the State co-operative bank at Madhya Pradesh was reconstituted into two, one at Vidarbha and the other at Mahakoshal. The State co-operative banks at Ajmer, Bhopal, Coorg and Vindhya Pradesh ceased to be apex banks. Two apex banks were newly formed, one in Manipur and the other in Tripura. Thus at the end of June, 1957, there were 23 State co-operative banks.

Membership

There is wide diversity with regard to membership in various banks. All the apex banks except those in Mysore, Punjab and West Bengal include individuals among members. In Bombay, Assam, Hyderabad (Andhra), and Kerala the individual membership constituted a preponderating element. The total mem-

bership of these banks was 33,440 comprising 10,253 individuals and 23,187 banks and societies.

Business

The total working capital of the State co-operative banks in India at the end of 1956-57 amounted to Rs.79.54 crores, of which owned funds amounted to Rs.8.78 crores (11 per cent), deposits from central banks, societies, individuals and other sources amounted to Rs.38.39 crores (48.2 per cent). Loans from Government amounted to Rs.6.19 crores (7.8 per cent), and from Reserve Bank Rs.25.76 crores or 32.4 per cent. However, the position was not so satisfactory in respect of owned funds as would appear from the above figures as reserve fund and other reserves in several cases did not represent surplus assets. Cash balances of the apex banks amounted to Rs.8.61 crores or about 12 per cent of the borrowed funds. Most of the State banks work on a very low cash ratio. The total share capital of the apex banks at the end of 1956-57 was Rs.5.31 crores, of which the State contributions formed Rs.2.05 crores or 38.6 per cent. The statutory reserve and other reserves had only moderately risen. The increases in owned funds were recorded only in such States as Bombay, Assam, Madras and the U.P. Loans due by banks and societies amounted to Rs.46.88 crores while those due by individuals were Rs.2.74 crores. The total loans outstanding amounted to about Rs.49.62 crores or nearly 70 per cent of the borrowed funds. The level of outstandings in respect of those due by individuals as well as banks and societies has been showing a steady rise. Though the extent of overdues or bad debts is not known in the case of all banks, overdues are heavy as a general rule except in Madras, Bombay and the Punjab.

The working relation of the State banks with other co-operative organisations may be briefly stated here. These banks, except in Bombay where some primary co-operatives in some districts are still financed by branches of the apex bank, do not advance loans directly to primary societies. Though the State co-operative banks do not exercise any control over the management of central banks, they guide their working by offering advice on important matters. In Madras, the reserve funds of central banks are deposited with the Madras State Co-operative

Bank. In the Madhya Pradesh also the reserve funds of central banks and societies are deposited with the State bank. Moreover, the State banks in the Madhya Pradesh and Bihar had assumed control over the working of central banks coming under the rehabilitation scheme. In Bombay, the activities of central banks and urban banks are co-ordinated by an association organised in 1939 called the Bombay Co-operative Banks' Association. In several States, co-operative conferences are held under the auspices of the State co-operative banks where topics of common interest are discussed and policies formulated. The State co-operative banks particularly in Bombay and Madras have assisted the development of special types of societies such as sale societies, marketing societies, housing societies and weavers' societies, by advancing loans, giving grants and in other ways. The State banks form the corner-stone of the co-operative movement and where their working is sound, they have imparted strength to the whole movement.

One of the main defects noticed in the working of the State co-operative banks is that (a) these banks advance loans to traders, merchants and other individuals, *i.e.*, persons who are not members of primary societies, to the neglect of co-operative institutions. The percentage of finance obtained by individual members to the total advances was as high as 81 in Himachal Pradesh, 65 in Assam, 62 in Mahakhal (Madhya Pradesh) and 55 in Vidarbha (Bombay) in 1956-57; (b) some banks, *e.g.*, in Rajasthan, Hyderabad (Andhra) and Mysore advanced substantial long-term loans out of short-term funds, for purposes such as financing house building societies, providing loans on mortgage of houses, etc.; (c) some banks combined trading with banking as in the case of Bihar State Co-operative Bank which followed the *Credit Agricole* Scheme. As a result of the deprecation of this practice by the Reserve Bank it has been given up in Hyderabad (Andhra) in the scheme of reorganisation and efforts have been made to recover the old dues from individuals. In the States of Bombay and Madhya Pradesh the volume of such business persists to be large. In the case of the Bombay State Co-operative Bank, there was an appreciable increase in advances to individuals from Rs.57.81 lakhs in 1952-53 to Rs.320.80 lakhs in 1953-54. This is explained by the fact

that though advances to individuals have been curtailed as a matter of policy and restricted to old customers the actual drawings were higher during 1953-54 as a result of a fuller utilisation of sanctioned limits. This is supported by the figures for the subsequent years 1954-55, 1955-56 and 1956-57 when the loans advanced to the individuals were low at Rs.39.68 lakhs, Rs.38.49 lakhs and Rs.36.02 lakhs respectively. Another fact which explained this high advance in that particular year was the improvement in commodity prices which resulted in an increased demand for funds against the pledge of agricultural produce. In Madhya Pradesh fresh advances to individuals declined from Rs.5.68 crores in 1955-56 to Rs.2.96 crores in 1956-57.⁵ In Assam and Himachal Pradesh also, loans to individuals were at the high of Rs.2.59 crores and Rs.1.02 crores against Rs.1.40 crores and Rs.24 lakhs to societies and banks, respectively.

The position indicates the advisability of curtailing business with individuals with a view to eliminating it altogether ultimately so that the entire funds of the apex banks could find an outlet only in co-operative channels. The reason for advancing loans to individuals mainly rests on the complaint that the channels for co-operative business have dried up, and if the funds of the banks are to be utilised they should find scope in commercial lines. While even in principle this argument is unsound, in practice by so doing the banks not only neglect their co-operative business but run the risk of losses attendant on commercial business for which they are not properly qualified and for which they are not meant.

Another undesirable feature in the working of the State co-operative banks which had been noticed in the pre-war period and during the war-period was the undertaking of trading activities. The objection to this practice has also been made by the Reserve Bank on the ground that such a combination of banking and trading activities at the level of apex banks was detrimental to their interests. Even after this defect has been pointed out the Bihar State Co-operative Bank continued to under-

⁵ The decline in fresh advances in 1956-57 is due to the cession of Vidarbha which has an apex co-operative bank to the reorganised Bombay State. In 1955-56, such advances formed nearly three times those made to banks and societies in 1951-52 and nearly twice the amount made available in 1953-54.

take trading activities on a large scale under its *Credit Agricole* Scheme. In 1955-56, the Bank dealt in iron, Rs.2 lakhs; chemical fertilisers, Rs.112 lakhs; oil-cakes, Rs.1 lakh; textbooks, Rs. 6 lakhs; coal, Rs.43 lakhs. Till 1952, the sales of commodities were made against cash payment but since 1953 credit business has been also done in respect of chemical manures. In 1954 credit sales accounted for nearly half the quantity of fertilisers distributed. While the *Credit Agricole* Scheme is credited to have achieved some success in rehabilitating the credit structure of the movement in the States, the fact that the primaries and the intermediate central banks have continued to remain in a weak or dormant condition should indicate that the scheme has not proved quite a success as expected.

In Bombay, the State Co-operative Bank was conducting commission shops in West Khandesh and Sholapur districts, on a special request, in places where the local purchase and sale unions had been either liquidated or found to be mismanaged. The Bank sought to ensure the continuity in the arrangements for the marketing of agricultural produce. Even in these cases it has been suggested that the trading activities should be discontinued as early as possible.

In the evolution of the functions of the apex banks, the local conditions and problems have largely influenced the practice of these banks in their loan operations. With the changing pattern of the economy and the experience gained in the working of these institutions the problems which require examination are of an organisational nature in the case of newly constituted banks and one of consolidation and expansion in the case of older institutions.

According to the Maclagan Committee on Co-operation (1915), the functions of the apex co-operative banks are (1) the supply of funds from the public to the co-operative movement; (2) balancing of funds taken from affiliated co-operative institutions and (3) direction of provincial co-operative finance by the control and support of central banks. These three functions still continue to be their main responsibility. The recommendations of the Committee of Direction of the All-India Rural Credit Survey (1954) have enlarged the scope and opportunities of the

apex banks for service to the co-operative movement. With the entry of the States as a major partner in their affairs the banks have now to reach every credit-worthy borrower in the State under the Scheme of Integrated Rural Credit, according to which loans provided through rural credit societies for agricultural operations are to be recovered by the sale of the resultant produce at the nearest marketing society. Such a scheme not only requires superior leadership on the part of the apex banks but also initiative, guidance, supervision and control. Under these recommendations and as a part of the Second Five-Year Plan for the expansion of the co-operative movement, necessary arrangements for adequate control and prompt audit would be taken. The extent to which the agriculturists will really benefit by these arrangements will depend largely on the collective effort put forth by the apex banks in making use of the aids provided by the States for carrying out the programme.

RESERVE BANK OF INDIA AND AGRICULTURAL FINANCE

The Reserve Bank of India, being the central banking authority of the country, is required to maintain close contact with the agencies supplying agricultural finance as well. It has constituted for this purpose a separate Agricultural Credit Department under Section 54 of the R.B.I. Act. The statutory functions of this Department are (1) to maintain an expert staff to study all questions of agricultural credit and be available for consultation by the Central Government, State Governments, State co-operative banks and other banking organisations, and (2) to co-ordinate the operations of the Bank in connection with agricultural credit and its relations with provincial co-operative banks and other banks or organisations engaged in the business of agricultural credit. The Bank was required under Section 55 of the R.B.I. Act to make to the Central Government before the 31st December, 1937 a report with proposals, if thought fit, for legislation on the following matters, namely, (a) the extension of the provisions of the Act relating to scheduled banks to persons and firms not being scheduled banks, engaged in British India in the banking business; and (b) the improvement of the machinery for dealing with agricultural finance and methods for effecting a closer co-operation between agricultural enterprise and the operations of the Bank.

The Bank submitted the Preliminary Report in 1936 and the Statutory Report in 1937, in which have been described the special features of agricultural finance as well as the part the various agencies such as Government, commercial banks, money-lenders and co-operative banks play in providing it. According to these reports, the co-operative movement was, on various considerations, the best agency for supplying agricultural finance and although the co-operative movement in India had not so far come upto expectations, it was capable of playing its proper part in the direction of supplying credit facilities to the agriculturists provided it was reconstructed and revitalised. The linking up of the indigenous bankers with the Reserve Bank of India, as provided under Section 55(a) of the Act came up for review. On ascertaining the views of the scheduled banks and indigenous bankers, the Bank formulated its draft scheme for the direct linking of the indigenous bankers with the Reserve Bank. This scheme was based on the recommendations of the Central Banking Inquiry Committee and the legislation affecting banking companies in the Indian Companies Act. But the replies received on the scheme did not make it possible to recommend legislation for extending to indigenous bankers the provisions of the R.B.I. Act relating to scheduled banks. However, in order to bring the indigenous bankers in closer touch with the R.B.I., remittance facilities at concessional rates were extended to approved indigenous bankers. As a further attempt to bring the money-lender within the banking structure of the country, a scheme was prepared by the R.B.I. for rediscounting bills of approved money-lenders at concessional rates through the scheduled banks drawn for marketing of produce and maturing within nine months from the date of rediscount, provided the benefit of the concessional rate was passed on to the agriculturists. However, due to various reasons, particularly the uncertainties created by the passing of debt legislation, the scheme could not be given effect to.

The R.B.I. through the Agricultural Credit Department has, however, maintained close contact with the Co-operative Movement which is the main organised agency in the country for supplying finance to the agriculturists. The Department has undertaken several studies the results of which have been published in the form of bulletins. Its services have also been availed of

by the Central and State Governments, co-operative banks and other banking organisations by way of consultation. Though the Reserve Bank cannot make long-term advances to co-operative banks and thereby lock up its funds, it is permitted under the R.B.I. Act to purchase or rediscount bills or promissory notes bearing two good signatures, one of which has to be that of a provincial co-operative bank and drawn or issued for the purpose of financing seasonal agricultural operations or the marketing of crops and maturing within 15 months (Section 17(2) (b)) or to make advances for periods not exceeding 90 days against such bills or promissory notes (Section 17 (4) (c)). The Bank is also permitted to make advances to provincial co-operative banks upto 90 days against Government and other approved trustee securities (Section 17 (4) (a)). Though the R.B.I. is permitted to make advances to State co-operative banks (under Section 17 (4) (d)) against promissory notes supported by documents of title to goods, this provision has been practically inoperative due to want of warehouses in the country and the non-existence of documents of title to goods. However, the R.B.I. sanctioned accommodation to some well-managed provincial co-operative banks against government securities (under Section 17 (4) (a)). The R.B.I. also prepared a scheme for extending financial accommodation to the central co-operative banks through the provincial co-operative banks for the purpose of financing seasonal agricultural operations or the marketing of crops at special reduced rates (under Section 17 (2) (b) or 17 (4) (c)) of the Act. The response from the provincial co-operative banks to the scheme was good. However, the problem with the co-operative movement was not want of funds, but want of sound and remunerative sources of investment within the movement. Well-managed co-operative banks had ample funds at their disposal and they had always found the Reserve Bank of India willing to accommodate them during times of seasonal stringency or to tide over emergency.

Within the stipulations of the Act, the Bank has taken effective steps since 1947-48 to increase the financial and technical assistance available to the co-operative movement. The scheme of concessional finance which provides accommodation to State co-operative banks at 2 per cent, *i.e.*, 2 per cent below the current bank rate, following the raising of the bank rate to 4 per cent

in May, 1957, was a significant step in this direction. The period of repayment was similarly extended again from a period of 9 months to a maximum of 15 months. The procedure for granting finances has also been considerably liberalised removing the impediments and delays. As a result, the advances to State co-operative banks increased from Rs.6.65 lakhs in 1946-47 to Rs.50 crores in 1957-58 and 18 State co-operative banks took advantage of short-term credit facilities.⁶ The R.B.I. advanced medium-term loans to the extent of Rs.5.42 crores at the concessional rate of 2 per cent, with a maturity of between 15 months and 5 years to 12 State co-operative banks during 1957-58 as against Rs.1.57 crores sanctioned to 7 banks in the preceding year.⁷ But these facilities could be availed of mostly only by the apex banks of the two developed States of Bombay and Madras.

Pattern of Reorganisation

The pattern of reorganisation of the co-operative movement in India is now determined by the main recommendations of the Committee of Direction of the Rural Credit Survey, accepted in broad principle by the Central Government, by the R.B.I. and by a majority of the representatives of the co-operative movement. The most significant departure from the earlier criteria of development is the acceptance of the principle of state participation to co-operative institutions at various levels. It is felt that such financial partnership would provide additional strength to co-operatives and make available to them a fuller measure of assistance and guidance from government. The principle of state partnership is to apply specially at the level of the apex and central banks and in a more flexible manner at the level of primary societies. It is made clear that state partnership implies only assistance and not interference or control in the internal administrative structure of the movement. As a first step in the implementation of this principle, the R.B.I. has established a National Agricultural Credit (Long-Term Operations) Fund with an initial contribution of Rs.10 crores in February, 1956. Contributions of Rs.5 crores per annum will be made available to the Bank during

⁶ The Reserve Bank of India : Functions and Working, Reserve Bank of India, Bombay, 1958, p. 82.

⁷ Report on Currency and Finance 1957-58, Reserve Bank of India, Bombay, 1958, pp. 34-35.

the period of the Second Plan so that by 1960-61, the capital strength of the fund will be Rs.35 crores. The amount to the credit of the fund stood at Rs. 25 crores at the end of June, 1958. This fund will be the source of loans to be advanced to States to enable them to subscribe to the share capital of co-operative credit institutions. In 1957-58, the Reserve Bank advanced Rs.6.07 crores to 14 States from this fund as against Rs.2.68 crores advanced to 11 States in 1956-57.⁸ The R.B.I. Act has been further amended (July, 1956) to remove any ambiguity in the interpretation of the term 'agricultural purpose' and to provide for advances from this fund to small and medium cultivators for the purpose of acquiring shares in co-operatives. The R.B.I. sanctioned a credit limit of Rs.3.30 crores during 1957-58 to the Bombay State Co-operative Bank at the bank rate for meeting the working capital requirements of six co-operative sugar factories. The National Agricultural Credit (Stabilisation) Fund has been set up in June, 1956 with an initial contribution of Rs.1 crore. This fund is to be applied exclusively for making medium-term loans and advances to State co-operative banks to enable them to convert their short-term credit into medium-term loans when repayment of the former becomes difficult and would result in serious dislocation to the credit structure. A further amount of Rs.2 crores has since been contributed raising the amount to the credit of the fund to Rs.3 crores at the end of June, 1958. In pursuance of the recommendation of the Rural Credit Survey Committee, six apex banks, *viz.*, Andhra (2), Bombay (1), Madhya Pradesh (2) and the Punjab (1) have also created such funds at the end of June, 1956. The National Co-operative Development Fund will be complementary to the first, and would provide loans for the purpose of subscribing to the share capital of non-credit co-operative institutions. Borrowings from this fund can also be made for the purpose of construction of godowns, office for co-operative societies and for strengthening the administration of co-operative departments.

The second significant feature of the reorganisation of the movement proposed is the linking of the credit and non-credit societies so that the agriculturist can be provided with credit for seeds, manures, implements, and essential consumer goods and

⁸ Report on Currency and Finance, *Op. cit.*

at the same time is also helped in distributing his produce. Looking to the contemplated range of operations which is wide, the Committee has recommended that credit societies of a large size serving a number of villages should be formed by the amalgamation of the existing small societies. The societies to be started afresh should conform to the pattern recommended above by the Survey. A larger co-operative society should have a membership of about 500, the liability of each member being limited to 5 times the face value of the capital subscribed by him. Each society of this type is expected to have a paid-up share capital of about Rs.20,000, of which Rs.10,000 would be contributed by the State. Such a society would serve an appropriate number of villages grouped together for the purpose of providing a total annual business of about Rs.1.5 lakhs. Each society would have a trained manager. The Second Plan provided for the setting up of 10,400 large-sized credit societies. In 1957-58, there were about 4,470 such societies. Under this plan, the rural credit societies already existing or established anew would be linked to the primary marketing society serving a *mandi* area. Agriculturists will borrow for agricultural operations from the credit societies. The latter will collect the produce for disposal from the members through the marketing society. They will also purchase the stocks required by them from the marketing societies and then distribute them to the members. The Second Plan has targeted for the organisation of 1,900 primary marketing societies during the second five-year period. Each marketing society would have an adequate paid-up share capital, with State contribution at the average rate of Rs.25,000 per society. The primary marketing societies will be federated in an apex marketing society serving the State as a whole.

The reorganisation scheme also envisages the correction of the deficiency in the sphere of rural credit, *viz.*, the prevalence of a large number of non-credit-worthy farmers. In order to suit their needs it is proposed that loans should be advanced by credit societies on the basis of production programmes and anticipated crops. There would be a maximum credit limit for each member and within this limit each member can obtain loans according to his requirements. Loans will ordinarily be given in kind in the form of seed, fertiliser, etc., in order to ensure that loans are

put to appropriate uses. If cash loans are given, arrangements will be made to collect them in instalments but the members will have to agree in advance to market their produce through the primary marketing society.

The link between credit and non-credit activities is provided by the important institution of warehouses which will have to be constructed both by the primary marketing societies and the better organised credit societies. With this end in view, the Agricultural Produce (Development and Warehousing) Corporations Act, passed in June, 1956, enabled the establishment of a Central Warehousing Corporation for the whole of the country and a State Warehousing Corporation for each State. These corporations would function under the direction of the National Co-operative Development and Warehousing Board, set up in September, 1956. The Board is intended to promote the development of co-operative activities in general and particularly to assist the progress of warehousing, processing and marketing. The Central Government has provided it with funds for this purpose. The Board has advanced Rs.2.08 crores as loans and subsidies for the co-operative development programme in 1956-57. The maximum authorised share capital of a State warehousing corporation would be about Rs.2 crores but the issued capital may vary according to the requirements of the different States. The Central Warehousing Corporation, established in March, 1957, would subscribe half the capital and the other half will be found by the State Governments. The target for the establishment of warehousing institutions is 16 warehousing corporations which would set up 250 warehouses at different centres with a total storage capacity of a million tons. Warehousing corporations have been formed in 11 States. The Central Warehousing Corporation would have a capital of at least Rs.10 crores, of which the Central Government would subscribe Rs.4 crores, and the rest would have to be subscribed by the State Bank of India, scheduled banks, co-operative institutions, etc. This Corporation would set up large size warehouses at about 100 important centres. So far, it has set up 9 warehouses. The receipts issued by the warehouses will be treated as negotiable instruments on the security of which it will be possible to obtain credit from banking institutions.

Finally, the co-operative structure is further strengthened by the conversion of the Imperial Bank of India into the State Bank of India in 1955, with an obligation to open 400 branches during the first five years of its establishment, or such authorised extended period. As a first step, 100 places have been selected and when these are in operation there would be additional banking and credit facilities in rural areas besides better remittance facilities, and larger amounts of market finance. This scheme of co-operative finance is expected to assist in the development of agriculture both in the sphere of production and distribution and ultimately improve the standard of efficiency and the standard of incomes and living of the farmers.

The past record of the Indian Co-operative Movement which completed 50 years of its existence in 1955 is one of "bewildering contradictions,"⁹ and the path of Co-operation is strewn with wreckage in every State.¹⁰ The distinctive features of development in different parts of India are the lack of uniformity and lack of leadership as well as individual endeavour, official sponsorship including official regulation and administration which has been enthusiastic and efficient in some States but notably inefficient and also nominal in other areas. The future of the Movement will still depend on the proper appreciation of the local needs and the building up of a truly co-operative edifice based on the fundamentals of co-operation.

AGRICULTURAL NON-CREDIT CO-OPERATION

A complete picture of the work being done in co-operative finance involves an examination of the working of non-credit societies as well, for the value of the co-operative movement must be judged as a whole, taking into account all its aspects. The potentialities of the non-credit side of the co-operative movement were realised somewhat later, but, in recent years, considerable progress has been made in that direction. The sphere of co-operative marketing has been the most promising feature of the co-operative non-credit movement in several States.

⁹ Report of the Rural Credit Survey, p. 211.

¹⁰ Malcolm Darling: Report on Certain Aspects of Co-operative Movement in India, *Op. cit.*, p. 2.

MARKETING SOCIETIES

The marketing societies gained momentum during the decade and a half representing the war and post-war periods. But actually, these societies functioned as mere agencies for the distribution of controlled foodgrains, agricultural implements, seeds, manures and fertilisers, etc. The legitimate work of co-operative marketing, *viz.*, of arranging for the sale of the agricultural produce of the member-growers did not constitute the main business of the societies. The period of controls was marked by the establishment of a number of central and State co-operative marketing organisations. With the reorganisation of States in November, 1956, the apex marketing societies in some of the States were amalgamated. At the end of June, 1957, there were 13 State marketing organisations and 2,336 central marketing societies, *i.e.*, unions and federations as against 19 and 2,354 respectively in the previous year. These organisations had the main objective of co-ordinating the working of primaries and acting as their wholesalers in the distribution of controlled goods. However, in actual practice, the primary marketing societies worked as independent units and the expectation of linking up the State marketing society at the top with the chain of primary societies at the bottom did not materialise.

With the decontrol of foodgrains and other commodities which started about 1951-52, and was practically completed in the following two years, the marketing organisations came within the framework of a free market which opened up possibilities of developing co-operative marketing. But even these opportunities could not be utilised as some of the societies failed to make up for the activities connected with the distribution of controlled goods and substitute the business of marketing of agricultural commodities of the producers. Some societies had even to be wound up and if some others survived it was because that the distribution of commodities such as iron and steel, fertilisers, etc., still continued to be entrusted to them. The total turnover in respect of these societies also came down because of the removal of the distribution of foodgrains from their control. That would indicate that the various factors of resistance which inhibited the development of co-operative marketing in India have not yet been removed.

Table I gives particulars about the working of the co-operative marketing societies in India in 1953-57.¹¹ While the trend has been for an increase in the number of marketing societies the effects of decontrol on the working of the societies were evident from the fall in business turnover to Rs.24.51 crores in 1956-57 from Rs.34.47 crores in 1951-52. In general, the development of marketing societies has been uneven. The major problem is one of financial resources. Funds are required for advancing loans to members on the pledge of produce with a view to enabling them to hold it until a favourable price could be obtained for it. In some of the well developed States like Bombay, Madras, Andhra, Punjab, etc., the necessary accommodation was provided to marketing societies by the central co-operative banks, which borrowed funds for this purpose from the Reserve Bank of India. In Madhya Pradesh, the apex co-operative marketing society was financing the agricultural associations for the marketing of cotton and a special credit limit of Rs.15 lakhs was sanctioned by the R.B.I. for this purpose in March, 1955. But in other States the marketing societies had generally to depend on their own resources.

TABLE I
WORKING OF MARKETING SOCIETIES : 1956-57

					State Marketing Societies	Marketing Unions and Federations	Primary Marketing Societies
Number	..	..	..	..	13	2,336	9,731
<i>Membership</i>							
(a) Individuals	..	..	..	..	2,051	19,66,672	7,51,329
(b) Societies	..	..	..	..	1,899	40,834	@
Paid up Share Capital (Rs. in lakhs)	..	..	..	..	44.00	244.23	145.99
Loans Issued (Rs. in lakhs)	..	..	..	..	36.26	652.98	796.82
<i>Value of Goods Sold (Rs. in lakhs)</i>							
(a) As Owners	..	..	..	..	285.05	1,667.23	617.81
(b) As Agents	..	..	..	..	217.60	3,624.68	1,833.15
(c) Total	..	..	..	..	502.65	5,291.96	2,450.96

Source: Statistical Statements relating to the Co-operative Movement in India 1956-57, Reserve Bank of India, Bombay, 1958.

@ Not available.

¹¹ The data relate to the reorganised States, constituted under the States Reorganization Act of 1956.

The marketing societies in some of the States advanced loans for production purposes. In Bombay, 157 marketing societies provided production finance to the extent of Rs.82 lakhs during 1955-56, either on the security of land or on the borrower contracting to deliver his produce to the society for sale. The rate of interest charged on these advances varied from 6 to 9½ per cent. In Madras, three societies were allowed to give production finance against the security of standing crops and the collateral security of unencumbered immovable property valued at twice the loan amount. Finance was given on the condition that members should sell the produce through the society. In Bihar, 61 cane marketing unions advanced loans to members amounting to Rs.36 lakhs in 1955-56. A few societies in other States have also advanced loans for production purposes. The marketing societies have generally meagre resources by way of owned funds and they resort to borrowings from the central financing agencies to promote their business. It is not the legitimate function of marketing societies to advance production finance which is really to be done by credit societies and, therefore, this practice should be discouraged.

The inability of the central banks to undertake large-scale financing activities also prevented the flow of funds to marketing societies. In order that marketing finance may be made available to societies, the R.B.I. has provided (under Section 17(4)(d)) that the scheduled banks can borrow from them against the security of warehouse receipts. The way to avail of this facility is to establish licensed warehouses. Only Bombay, Madras, Madhya Pradesh and Hyderabad (Andhra) have passed the necessary legislation for the purpose of establishing licensed warehouses. In Madras, Andhra, Bombay, Assam, Madhya Pradesh, West Bengal, Orissa and Rajasthan, the State Governments also provide loans and subsidies to help the building of godowns. However, the achievements have not been commensurate with the needs of co-operative marketing and the establishment of licensed warehouses has made little head-way. Only in Bombay and Madhya Pradesh, licences have been given to co-operative institutions under the State Warehouses Act. In Madhya Pradesh, ten co-operative institutions have been granted licences.

In Bombay there were eight licensed warehouses run by co-operative marketing societies and market committees at the end of December, 1955. A review of the progress of the marketing societies in the different States is given below.

Bombay

Bombay was a pioneer in organising co-operative marketing societies in India. The cotton sale societies of Gujarat and Karnatak (now in Mysore) occupied a place of pride. There were at the end of 1956-57, 421 marketing societies. The membership stood at 1,66,098 individuals. The value of goods sold was Rs.14.17 crores in 1956-57 as against Rs.20.07 crores in 1951-52. The decline in business was largely due to the removal of controls on foodgrains and essential commodities. The societies advanced loans to members for raising crops as well as marketing the produce. The loans on the pledge of produce were usually made to the extent of 60 to 70 per cent of its value. The advances of all types during 1956-57 were Rs.3.93 crores. The record of progress was not uniform among all types of marketing societies. The single commodity marketing society dealing in cotton, fruits and vegetables fared better. The cotton sale co-operatives which first originated in the Karnatak area have spread all over the cotton-growing areas of the State. There were 94 cotton sale societies at the end of June, 1956. There were two types of cotton sale societies. The societies in Gujarat area were of the 'Surat model', (adopted in Nasik and Khandesh districts also) under which cotton of a similar strain was pooled and sold after it was ginned jointly. The surplus income after deducting ginning, processing, insurance and overhead charges and after adjusting the advances was distributed to members. In the type of societies established in the Karnatak, the produce was not pooled but sold on a collective basis and an average price was given to the cultivator. The processing activities were also not done by the societies. The number of ginning and pressing societies also increased to 26 in 1955-56 from 13 in the previous year and they ginned 13 lakh maunds of cotton earning a commission of Rs.16,793. There were 14 co-operative sugar factories in the State at the end of June, 1956. The pattern of raising block capital for these factories was a loan of about Rs.40 lakhs to Rs.45 lakhs from the Industrial Finance Corporation,

Rs.10 lakhs as share capital contribution by the Government of Bombay and the balance to be raised by way of share capital contribution from the members of the societies. Under the Second Plan, the Government of India granted financial aid for the purpose of setting up the factories at the rate of Rs.15 lakhs per factory subject to a matching contribution by promoters. There were 60 institutions of the category of sale societies dealing with vegetables and fruits. Among these societies the Surat and East Khandesh societies did considerable business in plantations. The marketing societies in the districts of Kolhapur, Nasik, Ahmedabad and Panchmahals did some business in foreign trade in cotton, ground-nut, onions and chillies.

The Bombay State Co-operative Marketing Society (1941) (now in liquidation) was the apex marketing organisation in the State. Its main activities were (1) the sale of agricultural produce of members of affiliated societies and other members to their best advantage and (2) the supply of agricultural requisites. It satisfied a long-felt need for a central purchasing and sale agency at the terminal market for the agricultural producers' and consumers' societies. It established contacts with apex marketing institutions outside the State. During the year 1955-56, the value of sales amounted to Rs.15 lakhs. The society, however, worked at a loss on account of its business in fertilisers. There was neither regular co-ordination between this and the societies at the district level nor did the business of the society expand after the withdrawal of controls.

Under the Bombay Co-operative Multipurpose and Sale Societies Construction of Godowns Loans Rules, 1940, and the Bombay Warehouses Act, 1947, loans equal to 50 per cent of the cost of godowns and 25 per cent subsidy in deserving cases were given to co-operative societies and agricultural produce market committees for the construction of godowns and warehouses. The assistance by way of loans had been increased to 75 per cent under the Second Plan. During 1955-56, loans and subsidies amounted to Rs.3.7 lakhs and Rs.1.5 lakhs respectively including the assistance under the pilot scheme.

*Madras*¹²

Co-operative marketing in this State has made considerable progress. The societies deal in all varieties of produce which grow in the respective areas and the activities are not confined to a single commodity. Groundnut, cotton, paddy and chillies are some of the important commodities the marketing of which is undertaken on a considerable scale by well established marketing societies. In South Kanara and Malabar districts, sizable business is done in areca, cocoanut, pepper, coffee and potatoes. There were at the end of 1955-56, 119 societies, locally called 'loan and sale societies.' Their membership was about 1.49 lakhs. They issued loans during the year for Rs.115.93 lakhs and sold produce worth Rs.272.84 lakhs. The district co-operative central banks continued to finance these marketing societies, with short-term loans, over-drafts, etc., at a rate of interest not exceeding $4\frac{1}{2}$ per cent for issuing loans to their members on the pledge of produce and for purchasing and selling agricultural implements, fertilisers, etc. The funds for capital investment such as the construction of godowns, the installation of processing plants, etc., were provided only by Government which also subsidised the construction of godowns at the rate of 25 per cent of the cost of godowns. As grading of agricultural produce implies technical assistance, societies did not undertake this function. Usually the societies issued loans and advances to members on the security of all kinds of produce so that agriculturists who were in need of funds to pay land revenue and to meet domestic expenses might be able to hold over their produce for better market. The loans were given normally to the extent of 75 per cent of the market value in the case of foodgrains and 60 per cent in the case of commercial crops other than cotton, groundnut and supari. In the case of the last three commodities, loans were given upto 70 per cent of market value. Eight marketing societies undertook processing activities such as groundnut decorticating, cotton ginning, paddy hulling and coffee and arecanut curing. The total value of produce processed amounted to Rs.23 lakhs and the processing charges earned by them amounted to Rs.77,000. Considerable impetus has also been given to the organisation of co-operative sugar factories.

¹² The statistics for the Madras State refer only to the residuary State of Madras after bifurcation, excluding the data for the districts of the Andhra State constituted separately.

Four co-operative sugar mills were organised of which three were registered and issued licences but they had not started working. For the development of export trade, some marketing societies obtained permit for the export of chillies, onions and English vegetables to countries like Ceylon and Malaya.

The 'controlled credit scheme' introduced in the State was in operation in 19 circles in 1952-53. Twenty-five marketing societies worked the scheme through 349 rural credit societies in 1955-56. Under the scheme, the rural credit societies financed cultivators on condition that the crops raised with the loans given were marketed through the adjacent sale societies. The sale societies deducted from the sale proceeds, the amount due to the credit societies and remitted it to the financing bank on behalf of the rural credit society concerned. Thus the object is to link credit with marketing. The produce covered under the scheme were paddy, *ragi*, chillies, potatoes, groundnut, cotton and turmeric. The loans issued amounted to Rs.34 lakhs. The extent of land covered was 17,596 acres and the value of produce brought to the sale societies was Rs.50.84 lakhs. The controlled credit scheme is reported to have worked successfully in respect of commercial crops for which the value of produce brought to the sale societies for marketing far exceeded the amount of loans issued by the rural credit societies for their cultivation. In the case of food crops though a substantial increase in the amount of loans issued for cultivation has been noticed, the value of paddy brought to sale societies for marketing did not reach a corresponding level. This is explained by the fact that much of the paddy was held by the agriculturists for own consumption or sold away locally when prices were rising. The other reasons for the unsuccessful working of the controlled credit scheme though it has been now in existence for some years are the disloyalty of members to the societies and the lack of effective supervision.

Uttar Pradesh

In the development of co-operative marketing, Uttar Pradesh has made noticeable progress. There are two prominent categories of societies, *viz.*, (1) cane societies and (2) ghee societies, vegetable and fruit societies, etc. The ghee marketing societies numbered 512 at the end of 1955-56. These societies sold

ghee valued at Rs.4.26 lakhs. The greatest strides have, however, been taken by the sugarcane societies under the Cane Development Scheme. This scheme was initiated towards the end of 1935 with the help of a Central Government grant from the Sugar Excise Fund. Under the scheme, the factories were to purchase cane through societies and to pay the societies a commission on their purchases. For the effective operation of the scheme a large staff of cane development officers, field supervisors, supervisors for seed stores, etc., have been appointed. Various other practical steps have also been taken for the development of cane such as supply of improved seed, establishment of late and early ripening varieties in suitable proportion, introduction of better manuring practice and better methods of cultivation and taking of preventive measures against pests. There were 115 cane marketing unions at the end of 1955-56 with a membership of about 15.6 lakh growers, under the charge of the Cane Commissioner. Out of the total quantity of cane crushed by the sugar factories in the State, the co-operative sugarcane unions supplied 94.7 per cent in 1953-54. During 1955-56, the unions supplied to the factories 2,593 lakh maunds of sugarcane valued at Rs.33.80 crores. With a working capital of Rs.3.85 crores and owned funds amounting to Rs.2.69 crores they earned a commission of Rs.94 lakhs on the cane supplied by them to the factories.

These societies have a statutory responsibility of earmarking half of the amount of the commission earned to the Development Councils for development work in factory zones. In all, they distributed 21,492 maunds of oil-cakes, 41,784 tons of chemical fertilisers, and 20,817 maunds of *sanai* seed for manuring at the end of June, 1956.¹³ As one of the items of development was to distribute pure seed by replacing the impure or deteriorated varieties, nearly 37.72 lakh maunds of disease-resistant improved cane seeds were distributed to the growers. In 1949-50, the Uttar Pradesh Co-operative Cane Unions' Federation was organised as the apex society for all cane unions with the main function of pooling the resources of the members and utilising them in an integrated manner for the maximum benefit of all. Besides, it was also to undertake bulk purchase of fertilisers and implements and their

13 Annual Report on the Working of Co-operative Societies in Uttar Pradesh for the year ending June 30, 1956, Lucknow, 1958, pp. 14-15.

rational distribution among the unions. During 1955-56 the total turnover of the Federation was Rs.7·03 crores.

The Pradeshik Co-operative Federation is the apex institution for all the co-operatives in marketing and distribution activities. The promotion of production, marketing and general development is the main object of the Federation and for this purpose, district federations have been organised in all the districts and affiliated to the apex federation. The latter mainly deals in cloth business, the turnover of which amounted to Rs.81 lakhs at the end of June, 1956, and running of seed stores and sale of fertilisers, implements, etc. The total turnover of the federation amounted to Rs.6·67 crores during 1955-56. Besides, the financing of brick-kilns and tube-wells directly and indirectly was also undertaken. The price support policy of the State enabled the Federation to undertake the marketing of *gur*. Under this scheme, it made purchases at important *mandis* when the price of *gur* fell below Rs.10 per maund. Only stocks with the actual cultivator and not the merchants were purchased. It is expected that this scheme will help the producer from the adverse effects of slump in *gur* prices.

Other States

Co-operative marketing in Bihar is confined to the cane growers' and vegetable growers' co-operative societies and other unions, following the example of Uttar Pradesh. There were 7,940 societies in 1956-57 with a membership of 3·26 lakhs and a loan operation of Rs.37·20 lakhs and value of sales on commission basis at Rs.5·1 crores. The Bihar Sugar Factories Controls Act regulates the production and marketing of cane and fixes the maximum price of cane. The vegetable growers' societies numbered 67 with a membership of 1,810. The vegetables of the members are collected in the office of the society. They are classified and graded according to size and quality and disposed of in the nearest marketing centres at the prevailing rates. Some of the high graded vegetables are even packed and sent to out-stations though there are no provincial unions either of cane or vegetable societies. There were 70 co-operative development and cane marketing unions with 7,522 members and one cen-

tral co-operative vegetable growers' marketing union all of which had a limited area of operations.

In the Punjab, there were 129 primary marketing societies with a membership of 48,363 in 1956-57. The value of sales on commission basis amounted to Rs.39 lakhs. The co-operative commission shops of which there were 22 at the end of 1955-56 were the chief type of marketing societies. Other types of marketing societies such as the cotton development and marketing society, cane societies, district wholesale societies and cold stores have been recently organised. The cotton marketing societies collected the cotton of the members and supplied to the textile mills after converting it into lint. The cotton seeds are sold in the local market. The district wholesale societies organised only at the end of 1953-54, have the dual work of supply and marketing of agricultural produce. The cold stores provide cold storage facilities for the potato growers, and two of them were equipped with cold storage machinery. All the marketing co-operatives in the State were financed by the central banks and loans given to the cold stores were on a three-year basis carrying interest at $4\frac{1}{2}$ per cent. These were utilised for the purchase of machinery and equipment. The district wholesale societies have been federated into an apex institution.

In the Himachal Pradesh there was a federation at the top, 26 district and tehsil unions at the district and tehsil levels and multipurpose societies at the bottom for marketing purpose. There were no separate primary marketing societies. In Madhya Pradesh, the regional agricultural and growers' associations and the multipurpose societies functioned as the primary marketing societies while the Madhya Pradesh Co-operative Marketing Society was the only institution registered as the marketing society in the State. There were 46 primary marketing institutions in 1956-57 with a membership of 3,650. They sold goods to the value of Rs.9.84 lakhs. The apex marketing society had 106 individual members and 119 societies in 1956-57. The society arranged for the marketing of improved varieties of cotton valued at Rs.77 lakhs in 1955-56. It sold food grains, iron and steel, pump sets and engines and distributed fertilisers on an agency basis. The Society sold goods worth Rs.81.63 lakhs and

made a profit of Rs. 2 lakhs during 1956-57. The marketing of cotton is done under the cotton pool scheme, the regional agricultural and growers' associations working as agents. The improved varieties of cotton brought by producers at selected market centres are arranged for sale in bulk by auction on commission basis. The apex society finances agricultural growers' association for advancing loans to growers to bring their cotton to the pool. The R.B.I. has also provided special accommodation to the society at a concessional rate of interest for financing the cotton pool scheme. Similar schemes have been organised for the sale of foodgrains, pulses and other commodities.

In Orissa, there were 58 marketing societies of various types in 1956-57, with a membership of 8,778. Goods worth Rs. 2.54 lakhs were sold to members. The central banks and the State government advanced loans to the extent of Rs. 3.66 lakhs to co-operative marketing institutions. The State Co-operative Marketing Society at Cuttack was the co-ordinating agency for all marketing societies. The society was reorganised with the object of providing assistance to the producer-members of co-operative societies through its affiliated regional marketing societies and large-sized primary marketing societies, to dispose of their marketable surplus on a co-operative basis. It also rendered technical advice to the affiliated societies, and established links with the West Bengal and Bombay Governments for the supply of handloom cloth on a consignment basis.

There has also been some progress in co-operative marketing in Andhra Pradesh. There were 140 primary marketing societies with a membership of 1.1 lakh individuals in 1956-57. They sold goods of the value of Rs. 173.75 lakhs and made a profit of Rs. 5.57 lakhs. In the former Hyderabad State, the marketing societies comprised: (i) 117 taluka agricultural co-operative associations; (ii) 15 sale societies and (iii) 103 multipurpose co-operative societies at the end of 1955-56. The co-operative associations at the taluka level were organised for the purpose of financing the agriculturists and marketing their produce. They sold goods worth Rs. 32.39 lakhs. Linking of credit with marketing was planned to be promoted through the sale societies. The sale societies distributed goods to the value of Rs. 3.28 lakhs. The commodities dealt with were paddy, rice, jaggery in

Telangana (Andhra), and *jiwar*, wheat, gram, cotton-seeds, etc., in Marathwada and Karnatak areas. There were two apex marketing institutions, *viz.*, the Hyderabad Commercial Corporation and the Hyderabad Agricultural Co-operative Association, the former of which was established in 1943 as the wholesale agent of Government for the procurement of foodgrains. The working of these institutions have not been satisfactory.

MULTIPURPOSE SOCIETIES

The recent trend in the development of co-operative movement has been to organise multipurpose societies in spite of a large decline in the business of distribution of controlled commodities. This trend is particularly evident in the States of Uttar Pradesh, Bihar and Bombay as well as Himachal Pradesh and Delhi where a scheme of converting the existing primary societies into multipurpose ones has been taken on hand. In Himachal Pradesh this policy has been so effectively implemented that the number of primary credit societies of the unlimited liability type declined from 684 in 1951-52 to 187 in 1953-54. There were 470 multipurpose societies in 1955-56. Many of these societies have not however shown any attempt to adapt their business to the changed circumstances, after the enunciation of a policy of de-control. Some societies in Bombay switched over to lift irrigation work under the GMF scheme while some others constructed godowns. In Madras, a scheme of intensive cultivation through village co-operatives was tried. In Orissa some societies have undertaken the marketing functions while a few have taken up oil pressing, poultry breeding and joint cultivation. In Delhi, a few have constructed tube-wells and surface wells and are maintaining tractors. The Uttar Pradesh had the largest number of multipurpose societies at 41,660 with a membership of 1.3 million at the end of 1955-56. But the purchases and sales amounted to Rs.14 lakhs and Rs.13 lakhs respectively, just one-third of the volume of business done in 1951-52. In Bombay there were 6,133 multipurpose societies with a membership of 6.6 lakhs. There was a large increase in the number of societies in Bihar which rose to 10,483. In Madras the scheme of reorganisation of rural credit societies to enable them to undertake multipurpose functions has been discontinued since 1953. Similarly, in West Bengal and Madhya Pradesh also,

multipurpose societies which were organised during the period of controls had a lean period.

On a general review of the progress of these societies it is noticed that basically, the multipurpose concept does not seem to have been fruitfully and successfully worked out in practice to any significant extent anywhere. The non-credit activities which were even originally restricted to the distribution of controlled commodities greatly diminished. The main defect was that there were no efficient multipurpose supporting agencies to help and guide the primaries, as recommended by the Reserve Bank of India as early as in 1937-38. The Central Banks would not undertake this work as they confined themselves mostly to banking business. Only a few federation of marketing societies served a group of primaries. There were no such servicing unions to help the multipurpose societies. The real need is the provision of a multipurpose central agency to help the activities of the primaries as well as an improvement in the volume of resources, the creation of necessary popular appeal and an improvement in the efficiency of management of the co-operatives to undertake the multipurpose functions.

PROGRESS OF NON-CREDIT CO-OPERATION

Agricultural non-credit co-operation received an impetus during the war period particularly in the sphere of improving agricultural production. Under the programmes of planning, efforts to increase irrigation facilities, to improve agricultural techniques and to enlarge the area of cultivation will continue and co-operative endeavour will have a prominent part to play in all these activities.

In the sphere of agricultural production, co-operative activities have taken various forms such as the distribution of improved seeds and chemical fertilisers, provision of irrigation facilities and co-operative farming of different types.

Co-operative Farming Societies

Co-operative farming societies are of different forms and include land colonisation societies which are assisted by Government

in the form of tax concessions, loans, subsidies, allotment of waste lands, etc. They have made varying degrees of progress in different States in land reclamation, adoption of improved agricultural practices, provision of irrigation facilities, cattle breeding, etc. At the end of 1955-56, there were 1,701 co-operative farming societies out of which Bombay had 344, Punjab 441, U.P. 220, Rajasthan 92, West Bengal 72 and Hyderabad in Andhra 40.

In Bombay, the organisation of co-operative farming societies have been undertaken under a scheme since 1949, but the emphasis is shifted since 1952-53 to consolidation rather than the expansion of the societies. Out of 344 farming societies, 73 were joint farming societies, 145 tenant farming societies, and 126 collective farming societies. The membership was 12,638 and the societies covered an area of 60,766 acres of which 60,000 acres were brought under cultivation. Besides, there were 86 better farming societies. The better farming societies attempt to improve agriculture by giving better seeds, manure, implements, etc., to their members. Government assistance to these societies by way of loans and subsidies amounted to Rs.18.60 lakhs and Rs. 9.40 lakhs respectively, from May, 1949 to June, 1956.¹⁴

In Madras, the scheme of intensive cultivation introduced in 1949-50 in the composite State was in operation in 7 districts in the residuary Madras State. The societies selected for intensive cultivation were granted the lease of 1,566 acres of Government fallow lands, of which 868 acres were sub-leased by the societies to their members for the cultivation of food crops such as paddy, ragi, and other millets. The area actually brought under cultivation was 645 acres. Besides, at the end of June, 1956, there were 30 land colonisation societies, 24 for civilians and six for ex-servicemen. Of these, 28 cultivated Government lands while the other 2 cultivated private lands. The societies were assigned 14,726 acres of which 9,092 acres were reclaimed and made fit for cultivation. Government provided financial assistance by way of loans and grants amounting to Rs.48 lakhs for the purchase of bullocks and implements. During the same period,

¹⁴ Co-operative Societies Annual Administration Report, 1955-56, Volume I, Government of Bombay, 1957, p. 49.

there were 16 irrigation societies which brought under cultivation 7,803 acres.

In Andhra, village credit societies were selected for a scheme of intensive cultivation in 5 districts. They obtained 4,875 acres of Government fallow lands on lease. These were sub-leased to the members. There were 20 land colonisation societies with a membership of 2,444 civilians. The societies were allotted 10,880 acres of Government land, of which 8,356 acres were reclaimed and 7,186 acres were brought under cultivation. In addition, there were seven societies for ex-servicemen with 982 members. An area of 6,741 acres were allotted to them, of which 5,664 acres were reclaimed and 3,538 acres were brought under cultivation. Besides, there were 920 tenants' and field labourers' societies consisting of *harijans* and backward classes with 90,380 members. Of these, 618 societies with a membership of 64,011 secured on lease 74,052 acres of *lanka* and assessed waste lands from Government on an annual rental of Rs.4.6 lakhs. The tenant farming societies were the type which were encouraged in this new State. There were 10 societies with 1,094 members for the consolidation of holdings. Of these, only one society reported useful work consolidating 4 small holdings into 2 plots.

In the Uttar Pradesh, there were 220 co-operative farming societies of various types at the end of 1955-56. Of these, 121 were joint farming societies. The total area covered was 47,706 acres, the average per society being 217 acres. The better farming societies numbered 95. In addition, there were three collective farming societies and one tenant farming society. They had reclaimed about 9,000 acres of land. There were also 202 land settlement societies for ex-servicemen and displaced persons with a membership of 11,167. The societies for the consolidation of holdings numbered 606 in 1953-54. The area consolidated was 35,423 acres, 1,06,817 plots being reduced to 9,139.

Other States

There were 208 irrigation societies which bored 129 tube-wells in the Punjab. There were 441 co-operative farming societies, with a membership of 7,403. They covered an area of 96,466

acres, of which 56,720 acres were brought under mechanised farming. There were 10 collective farming societies in Delhi which were allotted 3,119 acres of evacuee agricultural lands for resettling the displaced families from Pakistan. There were also 5 better farming societies and 51 consolidation of holdings societies. The latter consolidated 49,249 acres of land in 62 villages. In Travancore-Cochin (Kerala), the co-operative farming societies numbered 34. They covered an area of 1,910 acres of land.

Milk Societies

Milk unions and societies have been organised in several States, particularly Madras, the Uttar Pradesh and West Bengal in order to solve the problem of supply of milk in the urban areas. These societies not only make pure milk available at moderate rates to urban dwellers, but assist producers to supply milk to obtain fair prices for their products. The societies in the producing centres are generally affiliated to milk unions situated in the urban area for the purpose of distribution and sale of milk. In the residuary Madras State, there were at the end of 1955-56, 576 milk societies and 19 milk unions. The value of milk and milk products sold by societies and unions for the same period amounted to Rs.69.84 lakhs and Rs.65.78 lakhs respectively. The most important union organised in the State is the Madras Co-operative Milk Supply Union which had 18 individual members and 150 milk supply societies affiliated to it. The Union is equipped with a pasteurization plant. It is the sole supplier of milk to all the State hospitals in the City of Madras besides supplying milk to the public and several institutions. The key farm centres sponsored by the Government of India were run by the unions. Agriculturists were enabled to get their cows served by the superior stud-bulls maintained there. The scheme sanctioned by the Government of Madras in April, 1951 for increasing the supply of milk to Madras City by 5,000 lbs. per day by expanding the activities of the unions at a non-recurring cost of Rs.1,11,000 and a recurring cost of Rs.20,500 was fully implemented. The Government advanced Rs.15 lakhs to these milk co-operatives for financing their members for the purchase of milch cattle and another Rs.15,000 for the purchase of lorries during 1954-56.

The co-operatives advanced loans to members to the extent of Rs.6.64 lakhs.

In Andhra, there were 251 milk supply societies with a membership of 16,000 at the end of 1955-56. The value of sales amounted to Rs.6.64 lakhs. The 18 milk unions sold milk of the value of Rs. 7.48 lakhs. However, the milk societies in Andhra sustained loss due to the lack of regulation of demand and large quantities of surplus milk remaining unsold during periods of peak production.

In Bombay State, the progress of co-operative dairying has been steady. There were 133 societies with 28,000 members. The value of milk sold was Rs.89.48 lakhs. Besides, there were 8 unions which sold milk to the value of Rs.79.11 lakhs in 1955-56. In the Uttar Pradesh, there were 222 milk co-operatives with 10,000 members and a sale of Rs.7.13 lakhs. There were 9 milk unions which sold milk and dairy products to the value of Rs.38.95 lakhs. The unions are equipped with modern pasteurization plants. In West Bengal, the number of primary milk societies was 164, the majority of which were located in the suburban districts of Calcutta. The Calcutta Milk Societies Union which is the pioneer union collected the milk from the primaries for sale to the public. The value of sales amounted to Rs.6.14 lakhs in 1955-56. In the other States, the progress made by the co-operative milk supply societies has not been noticeable.

Better Living Societies

Better living societies which have been organised in several States form the nucleus of rural development and uplift activities. As part of the rural re-construction work, roads have been constructed, private wells have been dug, tanks have been cleared, dispensaries have been established, schools opened, propaganda for curtailment of expenditure on social ceremonies have been conducted, village sanitation attended to, etc. Better living societies were first organised in the Punjab State followed by the others. Under the new Panchayat Act, the village panchayats have begun to exercise wider powers and have undertaken practically all the activities so far carried out by these better living societies. Consequently many of these societies have ceased to function. The number of societies has significantly decreased from 1,153

in 1952 to 64 in 1955-56. In the Uttar Pradesh where these societies were organised on a very rapid scale in the beginning, the 3,128 societies are all in a moribund state. In general these societies have yet to catch the enthusiasm of the rural population for active co-operative work.

Crop Protection Societies

Bombay is the only State which had a large number of crop protection societies. They have not been successful.

Crop Insurance

Though the need for providing against failure of crops is realised, no serious attempt seems to have been made in organising crop insurance in any part of India. In Mysore State, a scheme for grain insurance was prepared in 1919, but it was not put into operation. Surveys were also conducted in the former Baroda State with a view to framing some scheme for crop insurance in respect of wheat and rice but no further progress was made in that direction. In the Punjab, some attempts were made to provide relief to the agriculturist in the event of failure of crops and for that purpose crop failure and relief societies were organised. These societies were, however, of the nature of thrift societies and not in any way insurance societies. They encouraged savings in good years from members and returned them in years of famine and scarcity. They do not spread the risk and do not offer insurance cover against failure of crops.

Cattle Insurance Societies

Cattle insurance societies were organised in the British period in some Provinces in India such as Burma (pre-partition), the Punjab, Bombay and Coorg. But except in Burma, they never reached an advanced stage. In Burma, a co-operative cattle insurance scheme was introduced as early as 1911. The scheme flourished for several years and by 1925 nearly 400 cattle societies and one cattle re-insurance society had been registered. But from 1925 onwards there was a marked decline in this class of societies due to the failure of local primary agricultural credit societies (of which the cattle insurance societies were in reality offshoots), lack of proper supervision and control by the officers of the Co-operative Department and, finally, failure on the part of the members of

the societies to understand and appreciate the basic principles of agricultural insurance. In the opinion of the Calvert Committee on Co-operation in Burma, cattle insurance was a branch of co-operative activity too advanced for the type of members in Burma and the Committee recommended that it should be closed down.

NON-AGRICULTURAL SOCIETIES

Initially, co-operation was organised mainly for the agriculturists in the rural areas ; but the non-agricultural classes were not slow to realise the benefits of the Movement. Non-agricultural societies numbered 38,672 at the end of 1956-57, with a membership of about 64 lakhs. Credit societies numbered 10,150 ; purchase and sale societies (consumers' stores) 5,719 ; production, production and sale societies 16,825 and others 5,978. Their working capital amounted to Rs.161.30 crores. The non-agricultural classes have relatively more stable sources of income and are more enlightened and therefore more responsive to co-operative methods. These elements are lacking to a large extent among the rural population.

Weavers' Societies

Artisans' and weavers' societies which have an important bearing on rural economy, have made commendable progress in Madras, Bombay, the Punjab and the Uttar Pradesh, particularly since 1935 when the Government of India took up the problem of reviving the industry by giving subsidies to the Provincial Governments. But at the beginning of 1952, the handloom industry encountered an unprecedented crisis arising from the slump in handloom cloth trade. There was curtailment or stoppage of production on a wide scale, with consequent unemployment among the weavers. The steps to rehabilitate the industry comprised (a) the constitution of an All-India Handloom Board (b) the levy of an additional excise duty on mill-made cloth and (c) ensuring a market for the handloom products. The general principles drawn up by the All-India Handloom Board constituted in 1952, for the grant of financial assistance to co-operatives are: (i) advancing loans to weavers to enable them to contribute to the share capital of co-operative societies, (ii) helping weavers' societies with working capital, (iii) setting up marketing depots and inter-

State depots. The Board has also decided that development expenditure should largely be channelled through co-operatives.

Having accepted the principle that the rehabilitation of the handloom industry can be made only through the organisation of co-operatives, the necessary resources had to be found to provide loans to weavers for taking shares in primary weavers' co-operatives societies and for the provision of working capital for the societies. For the former purpose, provision has been made to give interest-free loans upto not more than 25 per cent of the weavers who were outside the co-operative fold, upto 75 per cent of the share capital in the case of new members of existing societies. For the purpose of working capital, loans could be made upto Rs. 200 per loom in the case of new societies and upto Rs.100 per loom for societies which dealt only in yarn distribution provided they were agreeable to convert themselves into production and sale units. The weavers' societies are provided finance by Government, to meet their requirements of working capital from the Cess Fund. More recently the Reserve Bank also has undertaken to provide accommodation to State co-operative banks for financing the weavers' societies in respect of their needs of working capital. The sales depots are given financial assistance to meet their working expenses in marketing. Since these depots could not sell the entire supply of the primaries and as a part of it had to be bought by central societies, financial accommodation to the latter for marketing of cloth produced by primaries has been approved in principle. The internal marketing of handloom fabrics has been left to State Governments but are done mostly through co-operative societies who are given grants for setting up marketing depots or emporia within the States subject to an average of Rs.4,000 per depot. The co-operative societies and State emporia were permitted to grant a rebate of nine to eighteen pies on every rupee on retail sales made by them of the value of Rs. 5 and above. The rebate on sales of handloom cloth was reduced from $1\frac{1}{2}$ annas to 6 *naye Paise* in the rupee, applicable all over the country from December, 1957. In order to permit exports of handloom cloth to foreign countries particularly in the Middle East, South and South-East Asian countries, an External Marketing Scheme has been launched. Emporia have been established in all these coun-

tries and the Madras State Handloom Weavers' Co-operative Society was to administer the scheme as the agent of the All-India Handloom Board, the cost of running the emporia being shared between Government and the societies in the ratio of 75:25. The working of the scheme has been transferred to the All-India Handloom Fabrics Marketing Co-operative Society, Bombay, from January, 1958.

The financial assistance given to the State Governments for organising co-operatives for weavers in the form of grants and loans amounted to Rs.10·90 crores from October, 1953 to March, 1956. The States utilised a sum of Rs.9·66 crores out of the sanctioned amount during the same period. The results of this outlay under the many-sided programme of development are fairly significant. There were 7,995 weavers' societies in the country with a membership of 9·14 lakhs in June, 1956. Out of this, the U.P. accounted for 1,009 weavers' societies, West Bengal 914, Madras 842, Andhra 674, Bihar 636, Bombay 563 and the Punjab 282. They had a working capital of about Rs.9·59 crores. The number of looms in the co-operative fold increased from 6·8 lakhs in October, 1953 to 10·3 lakhs at the end of 1955-56. Production of handloom cloth rose from 1,200 million yards in 1953 to 1,510 million yards in 1956. As part of an expansion of marketing facilities, 1,151 sales depots, 34 government depots, 22 inter-state depots and 12 central depots were set up and 33 mobile vans were put into operation. The value of finished goods sold increased from Rs.13·93 crores in 1954-55 to Rs.22·96 crores in 1955-56, while the value of cloth sold under the external marketing scheme increased from Rs.6·8 lakhs to Rs.12·1 lakhs during the same period.

The rest of the non-agricultural co-operative movement is mostly confined to the urban areas and hence outside the scope of this book.

LAND MORTGAGE BANKS

The framers of the Co-operative Credit Societies Act of 1904 had realised the difficulties in the way of these societies being called upon to undertake long-term financing on the basis of land

mortgage security. These societies get funds on a short-term basis, and they work mainly on the principle of capitalising personal credit. It was felt, however, that this should not prevent them from accepting mortgage securities as collaterals, for, otherwise, the members would have to resort to the money-lender for such loans. Experience of the working of co-operative societies showed that these institutions could not afford to tie up their slender resources in a form of security which could not be readily realised nor undertake risks which might involve them in legal proceedings attendant upon foreclosure. For lending on a long-term basis and for helping in the liquidation of old debts, a financing agency with wider resources was, therefore, necessary. The solution suggested was the establishment of institutions on the model of the land mortgage banks in Germany.

Growth

The first land mortgage bank in India was organised in 1920 at Jhang in the south-west Punjab and a few more came into existence subsequently in that province but none of them proved successful. However, a real beginning of land mortgage banking in India was made with the establishment of the Central Land Mortgage Bank in Madras in 1929 for centralising the issue of debentures and for co-ordinating the working of primary banks in that province.

In 1929-30, there were only about 20 land mortgage banks in the country. In the 'thirties, there was considerable growth in the number of land mortgage banks especially in Bombay and Madras as central land mortgage banks were established in four States, *viz.*, Cochin, Mysore, Bombay and Orissa in this period. The number of primary land mortgage banks increased to 221 in 1938-39. During the war and post-war years, there was a shrinkage in the business of land mortgage banks as a whole due to an improvement in the economic condition of the farmers following a rise in the prices of agricultural produce and the beneficent effects of debt relief legislation in various parts of the country. The fresh advances granted by the central land mortgage banks declined from Rs.72.62 lakhs to Rs.54.29 lakhs during the years 1939-46, despite the fact that the working capital rose from Rs.248.95 lakhs to Rs.464.55 lakhs; but there has been an improvement in

the post-war years in the advances made by the primary banks. The fresh advances which fell to Rs.58·11 lakhs in 1945-46, rose to Rs.129·02 lakhs in 1950-51. Their number and membership also rose from 221 and 76,196 respectively at the end of 1938-39 to 286 and 1,86,330 respectively at the end of 1950-51.

In spite of this progress in land mortgage banking, large parts of the country still remained unserved by this type of institutions. The position at the end of 1956-57 was that land mortgage banking facilities were available in eleven States. The structure of land mortgage banking in these States conformed to three broad types. In the group of States comprising Madras, Andhra, Bombay, Mysore, Ajmer (Rajasthan) and Assam, there was an apex land mortgage bank at the State level with primary land mortgage banks at the base, operating over a whole district or over parts of a district. In the former States of Orissa, Saurashtra (Bombay) and Travancore-Cochin (Kerala), there was only a central or apex land mortgage banking institution which dealt directly with individuals. In the States of Uttar Pradesh, West Bengal, Madhya Bharat (Madhya Pradesh) and Rajasthan, land mortgage banking was carried on by primary institutions without an apex institution to co-ordinate their working. In Madhya Pradesh, land mortgage banking is at the State level but in some districts is carried on by a separate section of the State and central co-operative banks. At the end of 1956-57, there were 326 primary land mortgage banks and 12 central land mortgage banks in the country in addition to the land mortgage banking sections of the State and central co-operative banks in Vidarbha (Bombay) and Madhya Pradesh. The membership of the primary land mortgage banks stood at 3·34 lakhs, their working capital at Rs.12·70 crores, fresh advances to individuals at Rs.2·05 crores, and loans due from their members at Rs.11·51 crores. The working capital of the central land mortgage banks amounted to Rs.21·32 crores, and loans outstanding from banks and societies at Rs.14·94 crores.

Much of the progress made in the sphere of land mortgage banking is only in the States of Madras, Andhra and Mysore. Of the 326 primary land mortgage banking institutions in the country, 72 were in Madras, 70 in Andhra and 98 were in Mysore accounting

together for over 73 per cent of the total in number and 82 per cent of the working capital of the primary institutions. Thus, arrangements for long-term agricultural finance are either grossly inadequate or non-existent for a large part of the country. In terms of volume of finance made available to the agriculturists there has not been any significant improvement. The loans issued have been predominantly for the purpose of repayment of old debts and redemption of mortgages and only negligible proportions of the total advances were for land improvement or other productive purposes. According to the investigations of the All-India Rural Credit Survey, repayment of old debts accounted for 95 per cent or more of the total advances in Madras (including Andhra) and Mysore, 59 per cent of the advances in Madhya Pradesh and 49 per cent of the advances in Bombay. In the last two States, land improvement including digging of wells, purchase of machinery, tractors, etc., accounted for 14 and 20 per cent respectively of the total advances. In Saurashtra (Bombay), loans were advanced to tenants chiefly for acquiring occupancy rights in the wake of land reforms introduced there. It is significant to note that all co-operative institutions together accounted for only 2.4 per cent of the total borrowings of cultivators for long-term agricultural purposes and for about 8.7 per cent of the total borrowings for repayment of old debts. In recent years there has been a desirable shift in emphasis in the issue of loans from non-productive to productive purposes. In 1955-56, in Madras State, land improvement schemes accounted for as much as 30 per cent of the fresh advances; in Andhra the proportion was as high as 82 per cent; in Bombay it declined from 50 per cent in 1953-54 to 37 per cent in 1955-56, and 17 per cent of the loans were for the purchase of land while repayment of old debts accounted for about 40 per cent. This is indicative of the change in trend in the pattern of advances of land mortgage banks in favour of productive purposes.

Method of Working

Land mortgage banks in Madras, Andhra, Bombay, Madhya Pradesh and Mysore obtain the bulk of their finances by the issue of debentures which are guaranteed for principal and interest by the Governments of the respective States and rank as trustee securities. Central land mortgage banks in these States and

the State Co-operative Bank in the Madhya Pradesh have constituted sinking funds for redemption of debentures issued by them. Land mortgage banks in other States obtain their finance by way of deposits from the public or loans from the central banks and other sources. Land mortgage banks in India grant loans upto the maximum period of 20 years as the debentures floated by them have similar maturity. They have so far advanced loans mainly for redemption of old debts though the need for encouraging loans for land improvement is recognised in all States. Special legislation for the proper working of land mortgage banks and for enabling them to recover their defaulted loans without recourse to courts has been passed in Madras, Madhya Pradesh and Orissa while the existing Co-operative Societies Acts in Bombay and West Bengal have been amended so as to include special provisions for the proper working of land mortgage banks in the above respect. The Reserve Bank grants financial assistance to the central land mortgage banks by way of contribution to their debentures, which are guaranteed by the State Governments concerned in respect of repayment of principal and payment of interest. The share of contribution of the Reserve Bank to such debentures was raised from 10 per cent in 1948 to 20 per cent in 1950. A further step in the scheme was taken in 1953 when the Reserve Bank agreed upon a scheme of joint contribution with Government of India to the debentures of land mortgage banks upto 40 per cent of the issue, or the short-fall in public subscription, whichever was less, in equal proportions. The central land mortgage banks making use of these facilities were to dispense loans for productive purposes within one year, upto not less than half the joint contribution by the Reserve Bank and the Government. However, the scheme was given up from April, 1956 as the Second Plan did not contain any provision for long-term agricultural credit. The Reserve Bank continued to subscribe upto 20 per cent of the debenture issues of the central land mortgage banks. Besides, the State Bank of India initiated a policy of subscribing to the debentures floated by co-operative land mortgage banks,¹⁵ and invested Rs.69.5 lakhs in the debentures at the end of June, 1958. Land mortgage banks in India have received assistance from the Government

¹⁵ The Reserve Bank of India: Functions and Working, 1958, p. 84.

of their respective Provinces and States in the form of subsidies for meeting the deficits in the initial stages of their working, exemption in part or whole from payment of stamp duty or registration fees, free supply of village maps, etc. Their working is largely supervised and controlled by the Registrar of Co-operative Societies.

Defects in Working

These banks have practically confined their operations to advancing of loans for redemption of old debts. Even in this sphere, the progress made by them appears small relatively to the magnitude of the problem. In Madras, where land mortgage banks have been working with comparative success, their operations are restricted to irrigated areas while for the dry area of the State long-term funds are supplied by the Government under the Agriculturists' Loans Act. In other States the loans advanced by land mortgage banks form an insignificant part of the rural debt and have not touched even the fringe of the problem. Even within this limited sphere, the land mortgage bank loans have not done lasting good to the agriculturists. Experience has shown that in a number of cases, the borrowers relapse into debts even after their debts have been once cleared off by land mortgage banks. A cultivator who is habitually running into debt cannot be saved merely by the grant of longer instalments with lower rates of interests.

There is certainly danger in granting loans without any knowledge regarding the character of the borrower. The old co-operative ideal of requiring a man to undergo a period of probation in a co-operative society and to prove his fitness before liquidating his old debts deserves to be followed by land mortgage banks. It is desirable that before a person is granted a loan by a land mortgage bank, he should have been a member of a village society and that he has proved his fitness for the purpose by punctual repayment of loans and by developing habits of thrift. Even after a loan is granted by the land mortgage bank, he should continue to be a member of a multipurpose society so that he can obtain short-term finance as well as arrange for sale of his produce jointly with other members of the society. This would incidentally assist the land mortgage bank to recover the annual instalment through the society. A fuller benefit from land mortgage bank

loans is likely to be obtained only if there is closer co-ordination between various co-operative organisations and the borrower is taught to get his various needs such as credit, supply, marketing, etc., served co-operatively. Moreover, it has been noticed that borrowers of land mortgage banks do not get full benefit by way of reduction in their debts as provided under various debt legislations. It is, therefore, desirable that before a loan is sanctioned the debts should be scaled down by the debt conciliation board established under the statute, or that the debt conciliation boards set up by the land mortgage banks should be statutorily recognised for scaling down the debt. A closer co-ordination between debt conciliation boards and land mortgage banks is therefore essential.

Land mortgage banks in India have hitherto paid very little attention to advancing loans for productive purposes, such as purchase and improvement of lands or methods of cultivation or adding to the equipment of farming. No doubt, the existence of uneconomic and scattered holdings in the case of the small agriculturists who constitute the backbone of the country and the lack of interest in lands on the part of bigger landlords are hindrances in the way of undertaking large-scale improvements in lands. According to the All-India Rural Credit Survey, there is also considerable delay in the sanctioning of the loans. Delays exceeding one year were reported in the case of 36 per cent of the loans in Madhya Pradesh and 33 per cent in Mysore; in the case of Bombay and Madras, the corresponding percentages were 9 and 19, respectively.

Recommendations of the All-India Rural Credit Survey

The main recommendations of the Committee of Direction in regard to the issue of loans, supervision, etc., by land mortgage banks are that priority should be given to applications for loans for improvement, reclamation and development of land, purchase of agricultural machinery and equipments and other such productive purposes. Along with these, non-productive loans of low priority should be discouraged. Special efforts should be made to popularise productive loans. The period of repayment of loans should be related to the purposes of loans and different periods should be prescribed for different purposes. There should also be a proper machinery for the adoption of techniques and publicising

the scheme of credit and the procedure for obtaining loans. There should be appropriate co-ordination between government departments and the staff for supervision should be expanded. There should be close integration between the supervisory staff and State co-operative banks and central land mortgage banks. In addition, the Committee has made a further recommendation that State Governments should review their tenure and tenancy laws and take steps to eliminate such features in them as would avoid hindrances to the development of land mortgage banking; where land reforms necessitate restrictions on the mortgaging of title, the scope of such restrictions should be the minimum necessary. Thus selective mortgages, *e.g.*, to co-operative societies and to Governments could be made permissible. In regard to the issue of debentures which form the main source of finance for the central land mortgage banks, the Committee has recommended that the duration of the debentures should be in conformity with the purpose of the loan, *i.e.*, debentures for relatively short periods such as 5 or 10 years should also be issued. This procedure would ease the difficulties which land mortgage banks, especially those newly formed experience in finding a market for their debentures which are not subscribed to by the R.B.I. and the Government of India and are not acceptable to the money market unless these securities mature within shorter periods. With a view to helping the mobilisation of rural savings, in 1957-58, the Reserve Bank has drawn up a scheme of rural debentures with a maturity of 6-7 years and bearing slightly higher rates of interest than the ordinary debentures. They are to be issued at the time of harvest and sale of crop when funds are available with the agriculturists. The Reserve Bank made a special offer to subscribe upto a maximum of two-thirds of an issue of rural debentures, from National Agricultural Credit (Long Term Operations) Fund till the end of June, 1958.¹⁶ Under this scheme, the central land mortgage bank at Andhra floated rural debentures for Rs.20 lakhs in January, 1958. Similarly, the Saurashtra Central Co-operative Land Mortgage Bank issued in May, 1958, seven-year rural debentures of Rs.50 lakhs of which the shortfall in public subscription amounting to Rs.24.11 lakhs was covered by the Reserve Bank. As a result of these recom-

16 Report on Currency and Finance, 1957-58, p. 35.

mentations at least Rs.25 crores could be provided as long-term loans to agriculturists by 1960-61. In order to fulfil this target, most States have programmed under the Second Five-Year Plan for an expansion in land mortgage banking and for establishing new central and primary land mortgage banks where there are none. Thus, land mortgage banks have an important role to play in the rural economy of India if they can, in this manner, be made a part of a wider movement for the rehabilitation of agriculture.

THE CO-OPERATIVE MOVEMENT—CONCLUSION

The survey of the co-operative movement indicates that while the movement has no doubt contributed to the lowering of the interest rates in the rural areas and has helped to inculcate the virtues of thrift and self-help among the villagers to some extent, on the whole, it has failed to produce the results originally expected of it. Co-operation has been so far interpreted in a narrow sense and has failed to deal with the man as a whole in respect of his requirements. In the West, co-operative action has proved how it can "transform the whole human being, his personality, character, attitude to the community and attitude to life. Roughly outlined in this way, the rural co-operative society is seen not only as a factor in technical progress and material well-being; it is seen also to be an instrument of economic organisation, of vocational training and discipline, a centre of spiritual life and general education, a cell in the new social tissue which is re-establishing or carrying on that vital, solid cohesion and systematic collective defence which family feeling, neighbourliness and the tradition of mutual help kept alive in the old village communities."¹⁷

Judged in the light of these standards, the achievement of the movement in India appears as yet small. Much has indeed been done to rehabilitate the movement after the crisis which overtook it as a result of the economic depression. There is widespread realisation that despite the numerous shortcomings the progress achieved was still commendable when account is taken of the internal

¹⁷ Co-operative Action in Rural Life, Survey prepared by the Co-operation Department of the International Labour Office, 1939, pp. 30-31.

weaknesses in the rural sector which have handicapped the movement. No less important is the recognition of the fact that the State should take intimate interest in its growth and utilise it as a medium for the pursuit of socio-economic policies intended for the benefit of the disadvantaged sections of the population particularly in the rural areas. To this recognition, the Report of the All-India Rural Credit Survey (1954), has lent a new significance.

In the Second Plan period, the volume of short-term agricultural credit supplied by co-operatives is expected to be raised from Rs. 30 crores to Rs. 150 crores, the medium-term loans from Rs. 10 crores to Rs. 50 crores and the long-term loans from Rs. 3 crores to Rs. 25 crores. The chances of fulfilling these targets will depend largely on the implementation of the recommendations of the Committee for an integrated policy of rural credit and the efficiency with which the many agencies participating in this great endeavour appreciate their respective roles and play them effectively. While the responsibility for initiating the scheme of reorganisation and co-ordinating the activities of the agencies rest on Government, Central and State, as well as the Reserve Bank of India, the final and heaviest responsibility rests on the people themselves because it is on their enthusiasm and loyalty that the success of the movement can be ensured.

As Prof. A. F. Laidlaw has remarked in his report,¹⁸ it is important that co-operatives must not lose the vitality and the urge for self-expression and self-help which have brought them into existence. The final responsibility for the promotion of co-operatives rests with the movement itself and not with outside agencies. In this process, the people must be trusted and allowed to do things by themselves. The ultimate objective should be not simply to organise co-operatives but to build a genuine movement of the people that will endure.

18 Extension Work in the Co-operative Movement, Reserve Bank of India, Bombay, 1958, pp. 1, 5, 17 and 43.

CHAPTER XIV

RURAL LOCAL SELF-GOVERNMENT

¹
The creation of local self-governing institutions so as to harness and foster local initiative and interest occupies an important place in any well planned scheme of rural reconstruction. There are always problems in rural areas which are of local incidence and import, problems which can most effectively be dealt with only by the local citizen body. The part such institutions have hitherto played in the rural reconstruction effort in this country and what re-orientation of these local self-governing institutions is now necessary, are considered here.

PANCHAYATS

The panchayat is an ancient institution in India. It was this institution which enabled India to survive the various cataclysms of her political history and preserved the continuity of her cultural development. This body administered the affairs of the village on its own responsibility or as advisory council to the village headman. It administered justice and peace, maintained local order by watch and ward, provided for education, sanitation, public works such as construction and maintenance of buildings, roads, tanks and wells, and all other common amenities, economic and social, of village life, and collected and distributed alms to the poor. For its finances it relied mostly on the produce from the village common lands. Thus it was self-sufficient and self-supporting. Whatever the form of Government at the centre, the village remained an autonomous unit mainly self-governing. The early British administrators have paid ample tribute to these little republics, but the advent of the British rule with its highly centralised administrative system led to their decay and disappearance.

Decay of Village Panchayats

The administration of the village by the agencies of the Central Government, extension of the jurisdiction of modern civil and

criminal courts of the towns to the villages, growth in communications, progress of education, the new land revenue system, police organisation, migration of the best and ablest persons from the village to the town and the growing spirit of individualism facilitated its disintegration from within. The self-sufficient nature of the old quasi-democratic rural polity was broken. The Village Panchayat as a useful rural institution sank into insignificance.

Growth of Local Bodies in Towns

Gradually the need was felt for local bodies to look after their own affairs. The start for improvement was first taken in urban areas. The legislative enactments passed between the years 1842 and 1862 provided for the setting up of municipal institutions in towns. As a result of Lord Mayo's Resolution of 1870 the number of municipal bodies in urban areas increased. The rural areas did not figure at all in the scheme. Lord Ripon, however, showed a more sympathetic attitude. His Resolution of 1882 on local self-government led to the passing of a series of Provincial Acts. But only Madras and Assam followed up the suggestion of setting up sub-district boards, while other provinces concentrated power in district boards. Lord Ripon's Resolution, though commended as a milestone on the road to self-government, was, as subsequent events have proved, a false step, inasmuch as the start was made at the wrong end. The process was not the federation of smaller units into large ones, but the devolution of powers by district boards to smaller bodies. The smaller local bodies created for the talukas failed to be established and the district boards, as the Simon Commission found, did not show much vitality.

Decentralisation Commission, 1909

The Royal Commission on Decentralisation, 1909, pertinently remarked : "The scant success of the efforts hitherto made to introduce a system of rural self-government is largely due to the fact that we have not built from the bottom. The foundation of any stable edifice which shall associate the people with administration must be the village, one in which the people are known to one another and have interests which converge on well-organised objects." The Commission recommended that "an attempt should be made to constitute and develop village panchayats for the ad-

ministration of local affairs" even though "the system can be gradually and tentatively applied" to "make the village a starting point of public life." The Government of India published, in 1915, a resolution and issued to all Provinces, 'despite the apathetic reports from most of them,' "definite instructions to give full trial to a practical scheme of village panchayats, wherever it could be worked out in co-operation with the people." The Montagu-Chelmsford Report recommended "complete popular control in local bodies" and added that "responsible institutions will not be stably-rooted until they are broadbased." The Act of 1919 which transferred the portfolio of local self-government to ministers was followed by measures in several provinces to implement this policy.

VILLAGE PANCHAYAT LEGISLATION

The legislative Acts passed initially in the different Provinces aimed at the creation of local self-governing bodies in villages. The Indian States also were not inactive.¹

Conditions for Establishment

For the establishment of Village Panchayats there was no uniform practice in India owing to the diverse circumstances and conditions prevailing in the various Provinces and States of the pre-Independence period. In Bombay the Village Panchayats (Amendment) Act of 1939 made it compulsory to have a village panchayat in a village with a population of 2,000 or over. In provinces like Bengal, Madras, the U. P. and the Punjab, the Local Governments declared an area to be a village or Panchayat area. In every such declared area, there was to be a statutory Panchayat. In Mysore, Travancore, Baroda and Cochin there was a statutory Panchayat for every village. In Baroda, the general principle was that there should be a Panchayat for every vil-

¹ The following Provinces and States passed the necessary legislation : Bengal-Village Self-Government Act, 1919 ; Madras-Village Panchayat Act, 1920 (replaced and supplemented by the Madras Local Boards Act, 1930) ; Bombay-Village Panchayat Act, 1920 (repealed and supplemented by the Act of 1933) ; Central Provinces-Village Panchayat Act, 1920 ; the United Provinces-Village Panchayat Act, 1920 ; Bihar and Orissa-Village Administration Act ; Assam-Rural Self-Government Act, 1926 ; the North-West Frontier Province-Village Council Act, 1935 ; Punjab-Village Panchayat Act, 1935 ; Baroda-Village Panchayat Act, 1904 ; Travancore-Village Panchayat Act, 1925 ; Mysore-Village Panchayat Act, 1926 ; and Indore-Village Panchayat Act, 1928.

lage with a population of 500 and more. A village too small or with meagre income was attached to the nearest village so as to form a group Panchayat. Parts extremely backward, and with a largely illiterate population, were put together in a union panchayat. In other Provinces in British India, the establishment of Panchayats was on a voluntary basis. In the Central Provinces, for instance, the Deputy Commissioner, on an application made to him by the district council or by not less than twenty adult male residents of a village made an inquiry into the desirability of establishing a panchayat and then established one in the village. In Indore, the *Subha*, on his own accord or on the report of the *Amir*, or on an application by not less than twenty adult male residents of a village, and after satisfying himself, by a local inquiry, that the residents were generally in favour of it, that there was nothing to prevent its satisfactory working, and that suitable persons were available to act as *panches* and *sarpanch*, established a Panchayat, after taking the sanction of the Minister.

Judicial Powers

Besides the administrative powers conferred on Panchayats to enable them to discharge their obligatory, optional and delegated functions, there were some judicial powers conferred on them in some provinces. In Bengal, the United Provinces, the Central Provinces, Bombay, the Punjab, Bihar and the States of Travancore, Cochin and Baroda, the Panchayat was empowered to try minor cases like theft, simple hurt, offences of cattle trespass, violations of the Primary Education Act, etc. It could also entertain civil suits for money due on contracts, recovery of movable property, or its value, etc., when the value concerned was not over Rs. 200 in Bengal and the Punjab, Rs. 100 in the Central Provinces, Rs. 25 in Bombay, and Rs. 15 in the United Provinces and Indore. Higher limits required special powers from the Local Government.

Everywhere the Panchayat was given exclusive jurisdiction and no other court could entertain complaints falling within the Panchayat's jurisdiction. The procedure of trial was rather informal. No legal practitioner could appear on behalf of any party. Usually, the only punishment which the Panchayat could impose was fines. In Bengal, however, the Act provided for imprisonment for default in payment of fine.

Police Powers

In Bengal, the Act provided for police powers. The Union Board exercised these powers by means of its control over the *dafadars* and *chaukidars*. It was the duty of these two to keep watch and inform the President of the Board and the police officer of the union cases of murder, homicide, etc., and all crimes and offences of encroachment or obstruction to the duties of the Union Board, and to assist the police in the prevention of abetments and in the maintenance of peace and order within the Union. They had to attend muster parades and patrol regularly the beat allotted to them. They had also preventive powers. Their salaries and costs of equipment were paid by the Union Board. Unfortunately, on account of the all-pervasive Zamindari System in the province, the functions of the Village Boards were usurped by the representatives of the zamindars who always used them for their own benefit. The bulk of the village people had no voice in their administration.

Finance

The Decentralisation Commission suggested that a portion of the land cess collected in the village by the local board should be made over to the Panchayat. This suggestion was accepted for implementation. The Act in the various Provinces and States, however, provided for a Village or Panchayat Fund for every Panchayat, to which were credited all allotments, general and special, contributions and donations from the Central Government, Local Government, municipality, district board or local board. All kinds of grants-in-aid, taxes, cesses, rates, tolls, fees and costs, income from property and endowments, sale proceeds, interest or penalties on arrears, forfeitures, fines and compensations, and donations from private persons were other sources of the general income.

In all Provinces and States, the Panchayat could take the necessary steps to augment its income according to need, and levy, with the approval of the Government or superior local body, any fee, tax, rate, cess or assessment on lands not subject to the payment of agricultural assessments. In Bengal and Bombay it had power to collect arrears even by distraint and sale of the defaulters' pro-

perty. In Madras, it was empowered to take action against defaulters. In Bombay, Mysore and Baroda, it could make provision for the payment of the tax either in cash or labour. Usually the village people showed considerable reluctance to pay local taxes though they did not grudge contributing to funds collected informally. That explains why the Bombay Act of 1933 could not bring new panchayats into existence.

Control

In all provinces provision was made in the Act for the control of the Panchayats. In judicial matters, its actions were controlled by a competent authority with power to quash its proceedings, to revise its decisions, to withdraw or transfer cases to higher courts, and, in the last resort, to cancel its jurisdiction or to supersede it. Control over its finances and administrative activities was exercised by means of audit, inspection and power to cancel its resolutions, to execute, by means of any other authority, the duty or work neglected by it, and, in extreme instances, to supersede or dissolve it. The controlling authority differed in different Provinces and States. Generally, it was shared by Government agencies, ranging from the *Tahsildar* to the Collector or Commissioner, and superior local bodies, like the district or local boards. In some Provinces and States there was a regular salaried staff of Panchayat officers, like Registrars and Circle Officers. Where efficient central staff was appointed, the Panchayats have worked well as in Madras, Mysore and Baroda. The District Boards did not take sufficient interest in the development of Village Panchayats.

VILLAGE PANCHAYATS AFTER INDEPENDENCE

The development of Village Panchayats received a great fillip after the attainment of Independence and the adoption of a republican form of constitution in the country. The Directive Principles of State Policy (Article 40) lay down that the State shall take steps to organise village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government. Apart from this Directive, the phenomenal increase in the developmental activities of the State under planning has also brought out the need for an institution like the village panchayat as the unit of decentralised administration. The Planning Commission, therefore, have laid great em-

phasis on the constitution of village panchayats as an indispensable part of the administration in rural areas, "as representing the best interests of all sections of the community, their status is unique."²

In line with this policy, almost all the States have taken steps to cope with their increased responsibilities in development planning and have improved the existing legislation wherever necessary with a view to promoting quicker development of panchayats as well as entrusting them with greater responsibilities. In almost all the States, the necessary legal framework for the establishment of village panchayats has been provided and most of the States have also begun to push forward vigorously the organisation of these local institutions.³

The number of village panchayats increased from 83,093 in 1950-51 of 1,23,670 at the end of March, 1956,⁴ and again increased to 1,64,358 at the end of March, 1958.⁵ The number of villages covered was about 4 lakhs out of a total of about 5 lakhs of villages in the whole country. At the end of the Second Plan period (1960-61), the number of Panchayats is expected to go up to 2,44,564. There has been good progress in the establishment of village panchayats in Uttar Pradesh, Punjab, Rajasthan, Kerala, Himachal Pradesh, and the erstwhile States of Madhya Bharat and Saurashtra, where almost all villages are served by panchayats. The pace has been somewhat slow in Assam, West Bengal, Orissa, Mysore and Andhra ; while in other States, progress has

² See Report on the First Five-Year Plan, Planning Commission, 1952, Pp. 132-143.

³ In the reorganised States, village panchayats are constituted under the following Acts : (i) Andhra Pradesh : the Madras Panchayat Act, 1950, amended in 1955 ; (ii) the Assam Rural Panchayat Act, 1948, amended in 1952 and 1955 ; (iii) the Bihar Panchayat Raj Act, 1947 ; (iv) the Bombay Village Panchayats Act, 1933, amended in 1947, 1949, 1950 and 1956 ; (v) the Jammu and Kashmir Panchayat Act, 1951 ; (vi) Kerala : the Travancore-Cochin Panchayats Act, 1950 ; (vii) the Madhya Pradesh Panchayats Act, 1946, amended in 1953 and 1956 ; (viii) the Madras Village Panchayats Act, 1950, amended in 1957 ; (ix) the Mysore Village Panchayats Act and District Boards Act, 1952 ; (x) the Orissa Gram Panchayats Act, 1948, amended in 1951 ; (xi) the Punjab Gram Panchayats Act, 1952 ; (xii) the Rajasthan Panchayat Act, 1953 ; (xiii) the Uttar Pradesh Panchayat Raj Act, 1947, amended in 1950, 1952 and 1954 ; (xiv) the West Bengal Panchayats Act, 1956 ; (xv) the Himachal Pradesh Panchayat Raj Act, 1952, amended in 1953 and 1956 ; and (xvi) The Delhi Panchayat Raj Act, 1954, amended in 1959.

⁴ Committee on Plan Projects : Report of the Team for the Study of Community Projects and National Extension Service, Vol. II, 1957, p. 1.

⁵ *Kurukshetra*, Vol. 7, No. 3, December, 1958, p. 279.

been steady. Table I shows the number and coverage of panchayats in the reorganised States. As regards the working of village panchayats, possibly not more than 10 per cent of the total number of panchayats are functioning effectively, roughly half are average and the remaining 40 per cent are working unsatisfactorily.⁶ The legislations in the States give fairly comprehensive powers to the panchayats.

TABLE I
PANCHAYATS IN INDIA⁷
(September 30, 1957)

State			Number of villages	Number of Pan- chayats	Number of villages co- vered by Pan- chayats*	Average Popula- tion per Panchayat
Andhra Pradesh	..	..	25,450	8,613	..	..
Assam	..	..	25,327	422	17,598 (69.8)	14,277
Bihar	..	..	71,378	7,410	49,312 (69)	3,434
Bombay	..	..	54,281	17,745	24,385 (45)	1,231
Jammu & Kashmir	..	..	6,956	948	6,717 (96.5)	2,575
Kerala	..	..	1,633	894	1,248 (76.4)	12,019
Madhya Pradesh	..	..	71,751	12,580	42,155 (58.7)	1,163
Madras	..	..	17,363	7,147	9,000 (51.8)	2,448
Mysore	..	..	28,770	15,154	20,277 (70)	..
Orissa†	..	..	51,311	2,343	32,114 (62)	..
Punjab	..	..	20,855	10,905	20,855 (100)	1,198
Rajasthan	..	..	31,951	3,490	31,450 (98.4)	..
Uttar Pradesh	..	..	1,11,722	72,409	1,11,722 (100)	754
West Bengal	..	..	35,063	No statutory Panchayats in the State		
Delhi	..	..	336@	—do—		
Himachal Pradesh	..	..	14,491	468	14,491 (100)	2,274
Total	..	..	5,68,515	1,52,337	3,98,922	..

* Figures in brackets indicate percentage of villages covered to the total.

† Information for 9 Districts only.

@ 35 were deserted.

N.B. There are no *Gram Panchayats* in Manipur, Tripura, NEFA, Andaman & Nicobar and Pondicherry.

⁶ *Op. cit.*, Committee on Plan Projects.

⁷ *Kurukshetra*, Vol. 7, No. 3, December, 1958, p. 276.

WORKING OF VILLAGE PANCHAYATS IN STATES

Uttar Pradesh: Out of the 1,11,722 villages in this State, there is a *Gaon-Sabha* (Village Assembly) for every village with a population of 1,000 and above. There is a panchayat for every revenue village with a minimum population of 250. There is also a *Nyaya* (Judicial) *Panchayat* for every 4 to 5 *Gaon-Sabhas*. The total number of *Gaon-Sabhas* in 1954 was 36,139 and *Panchayat Adalats* (Courts) 8,542. There were a total of 72,409 panchayats at the end of September, 1957. The panchayats are governed by the U.P. Panchayat Raj Act passed in 1947 and amended in 1954. Besides the *Gaon Fund* at its disposal contributed from government grants, sale proceeds of property vested in the Panchayat and loans and gifts and grants from other local bodies, the *Gaon-Sabha* can also levy some taxes such as tax on the rent payable under the U.P. Tenancy Act, 1939. *Panchayat Adalats* can try specific criminal cases and civil suits or any other offence made cognisable by the *Adalats*. On the question of title, legal character, contract or obligation, the decision of the *Adalats* is not binding. The sub-divisional officer can ask the *Adalat* to revise his judgement but there is no appeal against the decision of the *Adalat*. Panchayats have special powers in matters of compromise. General powers of control and supervision are vested in the Development Commissioner who is ex-officio Director of Panchayats. During the period of four years since formation, the Panchayats in U.P. could build 948 miles of *pukka* roads and 12,871 miles of *kutcha* roads, constructed 32,134 wells and 7,000 Panchayat *Ghars*, converted 31,005 *kutcha* wells into *pukka*, and provided 200 miles of *pukka* drains. The total work done was valued at Rs. 9.54 crores, two-thirds of which were contributed either in kind or in terms of labour. Since the formation of *Nyaya Panchayats*, of the nearly 14 lakhs of cases which came before them for trial 13.29 lakhs were disposed of and 4.98 lakhs were compromised. In all, the revision applications formed only 5 per cent of the cases.⁸ Thus in the U.P. the *Panchayat Adalats* have been able to reduce litigation to a great extent. It is estimated that if the Panchayats could undertake the collection of land revenue they can earn about Rs.1 crore annually by way of commission in collecting Rs.16 crores of land revenue of the State.

⁸ A.I.C.C.: Report of the Congress Village Panchayat Committee, New Delhi, 1954, See Appendix B, p. v.

Madras : Of the 17,363 villages in Madras, 9,000 have been covered by 7,147 Panchayats which are governed by the Madras Village Panchayats Act passed in 1950 in supercession of the previous Acts amended in 1951. There are two kinds of Panchayats, Class I which are formed for villages with a population of 5,000 and Class II for villages below this limit. Additional powers are being given to Panchayats in respect of civil suits of the value of Rs. 100. The main source of revenue is the land cess of 6 ps. per rupee on the annual rent value of all lands and duty levied on all occupied lands and on the transfer of property. Though there are no separate *Nyaya Panchayats* in the State under the 1950 Act, all cases that were tried by village courts under the Village Court Act of 1888 were brought within the jurisdiction of the Panchayats with a raising of the pecuniary jurisdiction from Rs.50 to Rs.100. There is a separate department of Government, *viz.*, the Inspector of Municipal Councils and Local Boards and Regional Inspectors to supervise and co-ordinate the administration of all the Panchayats, District Boards and Municipalities of the State. It has been found by experience that the provisions of the Madras Act are not completely workable. Hence a suggestion has been made that the constitution of the Panchayats should be made optional instead of compulsory.

Madhya Pradesh : There are 71,751 villages in this State. Of these, 44,155 villages or 58.7 per cent, have been served by 12,580 village panchayats. The first panchayat legislation was passed in 1946 and this has been since amended by the Madhya Pradesh Panchayats Act of 1953 and 1956. The formation of Panchayats is made in three stages. In the first stage, a Panchayat is constituted for a village with a population of 1,000. In the second stage, villages with a population between 500 and 1,000 are covered and in the third stage villages with a population below 500 are covered. When the third stage is completed, *Gram* (Village) *Panchayats* are established on the criteria of physical proximity. The sources of revenue are fees, taxes, government grants and donations, besides a compulsory cess on land revenue at the rate of 6 ps. per rupee. Additional taxes include toll of vehicles, pack-animals, and bazaar, water supplies and the lighting fee. In the areas covered by the former State of Madhya Bharat, there are three tiers of panchayats : *Gram Panchayats* as the base, *Kendra Panchayats* above them at the

block level and *Mandal Panchayats* at the district level. The three layers are organically inter-linked. The functions of the *kendra panchayats* cover, among other things, adult education, development of agriculture, cottage industries, trade, watch and ward, and assisting *Gram Panchayats* generally. There is no clear demarcation of tax powers of the three types of panchayats.

Nyaya Panchayats are also constituted each for a circle of 3 *Gram Panchayats* or 20 to 30 non-*Gram Panchayats*. *Nyaya Panchayats* can entertain civil suits of the value of Rs. 100 but can admit cases upto the value of Rs. 500 with the consent of both the parties at dispute. *Nyaya Panchayats* are closely linked with the *Gram Panchayats* and no legal practitioner can appear before the former. *Janapada Sabhas* have also been established in the State with the responsibilities of supervising the efficient and proper working of the Panchayats. The Directorate of Social Welfare is also responsible for the proper working of the Panchayats. The Directorate has advisory powers for recommending to the Government the supersession of Panchayats for negligence and inefficiency. After supersession of the Panchayats the *Janapada* authority will take over the duties of the Panchayats.

Bombay: Out of 54,284 villages in the State, 24,385 or 45 per cent have been covered by panchayats. The total number of panchayats in September, 1957 was 17,745. The first legislation passed in 1933 has been successively amended and the Amendment Act of 1956 gave wider powers to the village panchayats. It was obligatory on the Government to establish Panchayats in a village with a population of 2,000 and above. For this purpose, two or three villages might also be combined. The amending Act removed this restriction with the object of establishing panchayats in every village. Besides the usual sources of revenue which include a compulsory tax on houses and lands, the Panchayats can also levy the pilgrim tax, tax on fairs, festivals and entertainments, octroi and tax on sale of goods, tax on marriages, adoption and feasts, and any one of these taxes may be made compulsory. Government paid 15 per cent of the land revenue amount or 25 per cent of the local fund cess, whichever was greater, realised within the limits of the villages. Government also granted three-fourths of the salary and allowances of the Village Panchayat

Secretaries. Since 1954-55, a statutory grant equivalent to 30 per cent of the ordinary land revenue is given to the panchayats. This accounts for about a third of their total income. Since the introduction of this grant, the special grant towards the pay and allowance of Panchayat Secretaries and all other grants for specific purposes were discontinued. There are *Nyaya Panchayats* in the State which are vested in the initial stage with powers to try minor offences and settle disputes of ordinary nature. In the civil side they can try cases not exceeding the value of Rs.100 and on the criminal side cases under certain Sections of the Indian Penal Code.

Between March, 1947 and March, 1951, the Panchayats were able to complete water supply works in 3,182 villages with a government allotment of Rs.2·21 crores for the purpose. There is no separate department exclusively for village panchayats. At the district level, the Special Officers appointed by the Government check and supervise the activities of the Panchayats. The District Collector has wide powers of control and supervision over the Panchayats. He has also the power to dissolve or supersede a Panchayat.

Punjab: The 20,855 revenue villages in the State have been covered by 10,905 Panchayats. The Punjab Gram Panchayat Act, 1952, regulates the formation of Panchayats in the State which are to be constituted for a village or a group of villages with a population of 500. In addition to the normal sources of revenue, the imposition of house-tax is obligatory on the Panchayats. If the Panchayat does not impose it, the Government may take steps to impose it. By the special permission of the Director of Panchayats, a special tax on all adult members for the construction of any public work of general utility can be levied. The *Gram Panchayat* can form judicial or *Adalati Panchayats*, one each for a population of 10,000. Such Panchayats exercise judicial functions both civil and criminal, the pecuniary jurisdiction extending upto Rs. 200 in civil cases. In the Punjab, the Panchayats were able to collect Rs. 5 lakhs for sanitation and deposit Rs.1·29 lakhs towards the national savings drive. They organised farmers' clubs, started 595 libraries, constructed and repaired 592 schools, and actively participated in anti-locust operations. In 1951-52, 63·2 per cent of the criminal

cases and in 1950-51, 54 per cent of the civil cases were compromised. The Panchayats are mostly dependent on a share of 10 per cent of the land revenue and the government grants. They have been doing good work as rural municipalities. There is a separate Panchayat Department in the State to supervise and guide the panchayats in their administrative and development work. The general direction, supervision, and control of the Panchayats is vested in the Director of Panchayats. The functions of the District Boards in the rural areas are also delegated to Panchayats with necessary financial allocation.

Bihar : There are two kinds of Panchayats, official and unofficial.⁹ Of the total number of 71,378 villages, 49,312 or about 69 per cent have been covered by 7,410 panchayats. The panchayats are formed for a village or group of villages with a population of 4,000 in the northern and southern districts and 2,500 in the Chota Nagpur Region. The *Gram Panchayats* have independent powers of taxation and they can levy two kinds of compulsory taxes : (1) labour tax with a minimum of 12 units of manual labour equivalent to 48 work hours, and (2) property tax. More than half of the total income of the panchayats is accounted by Government grants. Every *Gram Panchayat* has a separate *Nyaya Panchayat* known as the *Gram Kutchery*. There were 3,813 *Gram Kutcheries* in the State. In each district, there is a Panchayat Officer. A Gazetted Officer or the Chairman of the District Board can also inspect the office of the *Gram Panchayat*. The District Boards can also have a *Gram Panchayat* Committee and delegate some powers to the panchayats but this has not been implemented in practice. Though theoretically the *Gram Panchayat* in the State is expected to co-ordinate the activities of the development departments, in the actual experience of the working of the panchayats, this has not been achieved except in the Community Project Areas, and in the NES Blocks. The Director of Panchayats is the chief controlling authority at the State level.

Orissa : In Orissa, panchayats have been established in 32,114 villages (62 per cent) out of 51,311 villages in the State.

⁹ In the pre-reorganised State, out of 71,318 villages, 4,087 official panchayats covered 20,500 villages and 2,063 unofficial panchayats covered 6,200 villages. See Report of the Congress Panchayat Committee, *Op. cit.*, Appendix B., p. xiv.

The areas selected are compact with a population ranging from 5,000 to 10,000. Besides the usual sources of revenue, the *grain-golas* which have been established in many panchayats and which provide rural credit and supply improved seeds to the agriculturists at 25 per cent of interest payable in kind, augment the resources of the panchayats. There are *Adalati Panchayats* for a number of villages.

The new pattern of de-centralised local self-government in the State is the *Anchal Shasan*, formulated on the basis of recommendations of the Orissa Land Revenue and Land Tenure Committee. With the establishment of the *Anchal Shasan*, the District Boards were abolished. This new organisation has statutory control over such matters as management of markets, rest-houses, *sarais*, and other public institutions. The *Gram Panchayat* will derive one-third* of local cess levied in the areas from the *Anchal Shasan*. The working of panchayats is supervised by a Member of the Board of Revenue.

Assam : There are two kinds of Panchayats—the Primary Panchayats and Rural Panchayats. Every Primary Panchayat is composed of all adults in its area. The Rural Panchayats are formed for a population of 20,000 to 25,000 people. Each Rural Panchayat is divided into not more than 5 Primary Panchayats. Panchayats are formed *mouza*-wise. Out of the 25,327 villages in the State, 17,598 have been covered by panchayats. In regard to the resources besides the Panchayat Fund, panchayats derive a portion of their income from the Assam Relief Development Fund provided by the Government, and also the Fund built up at the sub-divisional level. There are no *Nyaya Panchayats* but there is provision in the Act for establishing *Panchayat Adalats*. Under the Assam Rural Panchayat Act, 1948, the panchayats are placed under the supervision and control of the District and Sub-divisional Administrative and Revenue Heads. The Rural Development Department co-ordinates the activities of the panchayats in regard to public health, education, etc.

West Bengal: Until 1956, there was no panchayat legislation in the State. Out of 35,603 villages in the State, only 477 were covered by panchayats set up by executive orders of the

Government. The West Bengal Panchayats Act of 1956 provided for the establishment of *Gram Panchayats* for a population of about 750 to 1,500 and the *Anchal Panchayat* for 10 to 15 *Gram Panchayats*. The *Gram Panchayats* will be responsible for village uplift and development work. The principal function of the *Anchal Panchayat* is to provide funds to the *Gram Panchayat* by levy of taxes and from out of Government grants. In addition, it imposes and collects a *chaukidari* tax out of which the expenditure on general watch and ward, prevention of crime and protection of life and property is made. This burden of taxes, however, restricts its otherwise wide scope of developmental activity.

Each *Anchal Panchayat* can constitute a *Nyaya Panchayat* for the area under its jurisdiction. The *Nyaya Panchayats* have exclusive powers of trial in civil and criminal matters. The Act also abolished the local bodies such as Union Boards, Courts and Benches. The Local Self-Government Department of the Government looks after the existing panchayats.

Despite the multiplication of the number of panchayats, their achievements on the whole are unevenly distributed among the States. Even within the States, these are confined to relatively small areas. A wide gap exists between the legislative framework and the actual working of panchayats.

ADMINISTRATION OF PANCHAYATS

The administration of the Panchayats, however, is not very satisfactory. It is found, that these bodies maintain accumulated balances which are large and, often, disproportionately high when compared to their income. It is, of course, possible that, in some cases, the Panchayats may be accumulating these sums for some capital projects they have in view. Even where this is the case, such a course would require shelving of many small-scale but important improvement works, and further, it would compel the villagers to wait for years before they embark upon the proposed projects. In such cases, it would be better if arrangements were made to give the Panchayats financial assistance by way of loans so as to expedite these bigger works for the immediate relief and benefit of the people.

In some cases, these balances are allowed to accumulate for want of necessary guidance from above, or dearth of able workers. Where men of enlightenment and experience are working on these village bodies and where the State officials too are sympathetic and helpful, the village people respond cheerfully and the results are very promising. On a review of the working of the Village Panchayats, it has been found that on the whole wherever they have been constituted, they are doing useful work particularly in respect of their obligatory duties in education, health, and public works. Besides, they have been of special service for maintaining dispensaries, for supplying electricity and for enforcing the Town Planning Act in rural parts of Madras, in spreading adult education as in Madhya Pradesh and Assam, for introducing agricultural improvements as in the Punjab and Mysore and for giving effect to social legislation such as the Marriage Registration and Child Marriage Restraint Act, the Marriage Expenses Controlling Act, etc., as in Indore. In addition to these executive duties, they also try trivial offences and thus save the villager from a considerable waste of money on expensive litigation. Yet, work of this kind if it is to be of lasting benefit cannot be done piecemeal. It has to be done with speed and on a comprehensive scale which means that the incomes of the Panchayats have to be much larger than they are at present. The majority of working panchayats over large areas have an annual income not exceeding Rs. 500 from all sources, including Government subsidy. The average annual income of a panchayat varied from less than Rs.200 in Uttar Pradesh to over Rs.3,600 in Bombay in 1954-55. It was less than Rs. 250 in Madhya Pradesh, below Rs. 300 in Mysore, and about Rs. 1,437 in the case of class II panchayats in Madras in 1952-53.¹⁰ When allowance is made to meet the cost of small establishments maintained by the panchayats, on account of pay of the secretary who is whole-time or part-time in many cases, conservancy staff, contingencies and contributions for the upkeep of *Nyaya Panchayats*, very little has been left for constructive and welfare activities. While it is true that scope is provided in the legislation for the Panchayats to cast their nets wide and to increase their incomes, the grants from government and local bodies are not sufficiently large in the finances of the panchayats as to form a basic fund.

10 *Op. cit.*, Committee on Plan Projects, pp. 4-5.

The financial resources of the Village Panchayats are chiefly drawn from (1) income which they are able to raise themselves and (2) funds placed at their disposal by government. The Local Finance Enquiry Committee (1951) in examining the position of the finances of the panchayats recommended that in regard to income which they raise themselves, every panchayat should levy the following taxes compulsorily: (1) house-tax or *chulla* tax or property tax, and (2) general sanitary cess. The remaining taxes may be raised by Panchayats according to the needs and conditions. As regards labour-tax, compulsion should be avoided and if a person renders such labour willingly he should be allowed to do so; or alternatively, he may be permitted to make a payment in kind in lieu of the labour-tax. No penalty should be enforced on one who is unable on account of poverty either to work or to make any payment in kind. In view of the far from satisfactory conditions of most of the Village Panchayats, they were of the view that an unconditional allotment of 15 per cent of the land revenue levied in the panchayat areas should be passed to the Panchayats. In addition, there should be surcharge on the transfer of immovable property within the Panchayat's jurisdiction, the proceeds of which should go to Panchayat Funds. The financial responsibility of village panchayats for elementary education should be dealt with on the same lines as for other local bodies. In addition to the above, the Village Panchayats should be assisted by Government in the following way.

The salary and allowances of Panchayat establishment should be borne by State Governments at least to the extent of three-fourth as was the case in Bombay. Where watch-and-ward duties are compulsorily enjoined on them, the State Government should bear the cost of salaries and allowances of *chawkidars* and *dafadars*. Wherever possible, the Village Panchayats should collect land revenue and land cess on a commission basis. They should also be encouraged to undertake remunerative enterprises as organising markets, slaughter houses, cars and bus-stands and ferries. They should also usefully undertake co-operative farming, dairies, and such like activities under the guidance and assistance of the government. The review of the working of Panchayats, their ways and means of raising money, and their contribution to the amelioration of the villagers warrants the conclusion that the best way of ini-

tiating rural rehabilitation work is to place every village in the country under the management of a panchayat. India is a vast country and there is no other more effective agency to attend to an all-round improvement of village life. Excellent results can be obtained by thus harnessing local talent and resources under proper guidance and with proper financial aid and advice.

DISTRICT BOARDS VIS-A-VIS VILLAGE PANCHAYATS

An important problem in regard to the working of panchayats is their relation to the District Boards. There are about 206 District Boards or District Local Boards spread over all the States except Assam, Kerala and Madhya Pradesh. The District Board is responsible for the maintenance and control of primary and middle schools within its jurisdiction. It can also sanction grants to other educational institutions. It may establish and maintain charitable dispensaries and hospitals. It has in its charge construction of public works and the maintenance in a proper state of repair of all roads, bridges, channels, buildings, etc. One of the duties of the Board is improvement of rural sanitation, and in some cases, vaccination and famine relief. The main sources of income of District Boards are Government grants which account for 40 to 45 per cent of their total income, land cess and educational receipts. In Bombay, a statutory grant equivalent to 15 per cent of the land revenue is given to District Local Boards by the Government. Other sources of income are profession tax or the tax on property, entertainment tax, surcharge on stamp duty and licence fees. Besides the general grants-in-aid, the State Governments usually meet a percentage of the dearness allowance given to the staff. In most States, the powers of the District Boards in respect of education, health, conservancy, public works, etc., have been delegated in some measure to the panchayats or Union Boards where they exist.

The administrative control of the panchayat is, in some cases, entrusted to a Government agency and in most cases, to superior local bodies. In the Uttar Pradesh, the panchayats are required to co-operate with the District Board in certain matters. In Madhya Pradesh, the panchayats are controlled by the *Janapada Sabhas*. In Madras, the Village Panchayats are controlled partly by Govern-

ment and partly by the District Board. The control is exercised through audit, inspection, the power to veto resolutions, and enforcing the performance of particular duties. In extreme cases, the panchayat may even be superseded. In Bombay, District Boards are given limited powers of control. In actual practice, the supervision exercised by District Boards and *Janapadas* over the work of panchayats is scanty and ineffective.

In many States, the Panchayat Act provides for appointing special Government Officers to supervise over the panchayats and to direct their growth ; but this provision has not been very effective as the appointment is generally left to the discretion of the Commissioner of the Division concerned. The District Officer or the President of the superior local body usually does not have the necessary knowledge to effectively control the Panchayats. Audit and inspection are therefore not always properly done. Where, however, special officers are appointed, the panchayats work efficiently as in Madras and Mysore and carry on useful functions.

Efficiency of Local Bodies

With regard to the efficiency of the local bodies the Simon Commission remarked that "In every Province, while a few local bodies have discharged their responsibilities with undoubted success and others have been equally conspicuous failures, the bulk lie between these extremes." On the whole, in the past, it is undeniable that the local bodies have been found to be inefficient in administration and inadequate to the tasks of management in respect of education, medical aid, roads and other public works. The main reason is that the Panchayat Acts in many States do not cover the relationship that should exist between panchayats and local bodies at higher levels. While their financial resources are inadequate, the scope of their functions has gradually expanded under pressure of social and economic changes. There has been a general reluctance to levy fresh taxes and enforce existing taxes effectively. There have been complaints of under-assessment and interference by elected members. Some of the District Boards are manifestly unwieldy in size and population. The efficiency of working of these bodies has suffered considerably owing to the vesting of policy-making and executive functions with the President and the Standing

Committees. The reduced powers and transfer of certain important functions as also the multiplicity of committees, both statutory and *ad hoc*, appointed at the district level, have undermined the importance of District Boards. The constitution of District Planning Committees practically in all States, for instance, has had a weakening effect on the powers of District Boards. Their supervision and control of panchayats is very unsatisfactory : as advisory bodies, they proved themselves equally disappointing. In some cases, the staff is utilised for political propaganda and election work instead of doing public service. There are often improper appointments and improper dismissals. There is also considerable corruption.

RECENT REFORMS

For a long time, the powers of the Provincial Governments to intervene in the affairs of the local bodies for small but essentially serious lapses were limited and the only alternative for them was to supersede the bodies and take over their administration. Governments were very reluctant to use these drastic powers and therefore the mismanagement of affairs was allowed to continue. In other countries, apart from possessing special powers for interference, Governments are able to regulate local affairs by means of grants-in-aid. They insist upon the appointment of qualified and well-paid men as secretaries and inspectors. Through the expert staff thus appointed they control the administration of local bodies from day-to-day so as to obviate the need for drastic action when it is almost too late. In India, these defects in the administration of the local bodies were only recently noticed by the authorities and attempts have been made to correct them.

The Village Panchayat Committee of the All-India Congress Party, which made a careful investigation of the working of panchayats in 1954 in the light of the objectives under the Constitution has made the following recommendations. The panchayats provide a sound basis for the establishment of healthy, democratic traditions in the country. The village panchayats should not only serve as units of local self-government but also as effective institutions for securing social justice and fostering corporate life, leading to conditions of fuller employment laid down in the Constitu-

tion. The State should therefore provide scope for the village panchayats to perform, in the village society, functions such as credit, marketing, supplies, etc. The functions of the panchayats should include municipal, social, economic and judicial activities, etc. Where educational functions are entrusted to the panchayats, the State through its Department of Education should be the Supervisory Body though some discretionary functions may be granted to such of those as have shown efficiency in working. There should be a Supervisory Body to regulate and co-ordinate the activities of the panchayats and this Supervisory Body should be vested with executive functions, and should also associate in its activities technical experts. The judicial functions of the panchayats should be kept separate and no lawyers should be permitted to appear before the judicial panchayats in order that justice may be rendered simple, cheap and expeditious in the villages. Special provision should be made for the training of workers to make them fully competent to take up development works and thus create opportunities of work for the unemployed young men of the village. The Development Council envisaged in the national plan should be linked to the village panchayats. This would help in creating a permanent kind of leadership in the village which should be able to tackle all aspects of rural development. The officers in charge of the Community Project and NES Blocks should actively participate in the evolution and growth of village panchayats. The village panchayats should have the right of collecting land revenue and 15 to 25 per cent of the collection should be allotted to them for their working expenses. They also have the power to levy a labour-tax and the efficiently and successfully run panchayats should, in addition, be permitted to impose taxes on land holdings, vehicles, professions, and on *hats*, bazaars, etc. The organisation and functions of the co-operatives should be kept distinct from the village panchayats for a variety of reasons.

In the reorganisation of administration at the level of the village and its integration with the higher levels of administration, the panchayats should develop as the foundation of rural democracy. The panchayats should be assigned duties and functions in a manner that would make them the nuclei of rural life. It may not be possible to formulate uniform rules or procedures in

regard to their constitution and working. There should be no drive for rigid uniformity. Each State and in fact different areas in the States, should work out patterns or structure of administration that will suit their own conditions.

PROBLEMS OF REORGANISATION

On a review of the position of the panchayats at the end of the First Five-Year Plan, one general defect noticed was that while a number of them had good leadership, many were handicapped for want of sufficient experience of development activities. The resources of panchayats were also in an unsatisfactory stage. In some States, a contribution from the land revenue to the panchayat funds was the major source of income. In Bombay, the proportion was 30 per cent, in Punjab 20 to 33 per cent, and Mysore 12 per cent. Other factors that have come in the way of greater panchayat participation in rural development are the existence of factions in villages, the failure of the people to attach the correct importance to panchayat elections, illiteracy, lack of understanding of the functions of panchayats and unwillingness to fulfil the obligations of panchayat office on the part of *sarpanchs* and *mukhias* as also comparative unwillingness of the project staff to use the panchayat machinery.¹¹ In this background, the problems in reorganisation are examined below.

The main problem in the reconstitution of village panchayats is the creation of viable units which would require the readjustment of the existing village boundaries. There are over 3·80 lakhs of villages with a population of 500 and below and more than 1,00,000 villages with a population between 500 and 1,000. The reconstitution of these villages into convenient units with a population ranging from 1,000 to 1,500, *i.e.*, about 200 to 300 families is essential to provide effective leadership and also sufficient financial resources for development of the panchayats. While it is necessary to see that the units are small enough to have a sense of solidarity, yet the villages should not be so small that personnel cannot be provided or the essential services unorganised for their benefit. Bearing this in mind, it was previously recommended that where individual

¹¹ Programme Evaluation Organisation : The Fourth Evaluation Report on the Working of Community Projects and N.E.S. Blocks, Vol. I, Planning Commission, Government of India, 1957, pp. 15-16.

villages were not large enough to serve as units for panchayats, a single panchayat may serve a population of 1,000 to 1,500. While this criterion may be useful up to a point, the real problem of concern is that of organising convenient village units. The Planning Commission is, therefore, inclined to favour a grouping together of existing villages into units on the criteria of population, the possibilities of economic working, etc. It is suggested that the village panchayat and the village co-operative should serve identical areas. It is also essential that these units should establish close contacts with adjoining units. Village Panchayats should be linked up at taluk or tehsil block and district levels. It is only through these forms of integration that the village panchayats can work efficiently and fit into the larger life of the community.

The second problem is that of the functions of Panchayats. In the First Plan, the recommendation was that legislation should confer on the Panchayats certain functions relating to village production programmes and the development of village lands and resources so that these bodies may be enabled to play an effective part in organising village development programmes. This proposal has been further amplified in the Second Plan. Broadly, the functions are classified as administrative and judicial. In the administrative sphere, the functions should be (1) civic, (2) development, (3) land management and (4) land reforms. The civic functions are already embodied in the legislation of almost all the States. In regard to development, the following activities are considered as essential: (i) framing programmes of production in the village; (ii) framing budgets of requirements for supplies and finance for carrying out programmes in association with co-operatives; (iii) acting as a channel through which an increasing proportion of Government assistance reaches the village; (iv) developing common lands such as wastelands, forests, etc., including measures for soil conservation; (v) construction, repair and maintenance of common village buildings, public wells, etc.; (vi) organisation of mutual aid and joint effort in all activities; (vii) promotion of co-operative societies; (viii) organising voluntary labour for community works; (ix) promoting small savings; and (x) improvement of livestock. This would mean that the panchayats will have two sets of programmes, *viz.*, those which are sponsored by Government through

extension works and by District Boards through their agencies and those which are undertaken by the village community on its own volition and from its own resources in manpower. For such a scheme to be effectively implemented, a great deal of educative work will have to be undertaken to give the workers of various categories in the village panchayats a clear idea of their duties and functions in a plan of intensive development. The National Development Council accepted the blocks and village organisations as basic units for formulating and carrying out development programmes. With a view to achieving this objective, it has been proposed that panchayats should plan and execute 'local works' including supply of drinking water, drainage and sanitation, communications, education, etc., in Community Development areas.

The third problem is that of finance. The practice of permitting local bodies to levy all taxes which the State Government can levy, and then exploiting these taxes for State purposes takes away the initiative from local bodies. It is necessary to revive the old practice of leaving certain well-marked fields of taxation for the exclusive or primary use of local bodies. It is suggested that a proportion of the land revenue in each village, assigned to the panchayat for local development should serve as a nucleus fund. This should be augmented by the panchayat from contributions in labour and money from members of the community. The allocation to the village panchayats by the States may be in two parts, a basic proportion of 15 to 20 per cent of the land revenue and an additional grant extending upto 15 per cent of the land revenue on condition that the panchayat raises an equal additional amount by taxation or voluntary contributions. The panchayats should thus be assisted in exploiting other sources of income.

Lastly, village factions are also a powerful factor hindering the healthy development of village panchayats. While the existence of factions is admitted, this should be no reason for not making an effort to see that their bad influence is eliminated. The former State of Saurashtra, for example, created an organisation called the *Madhyastha Mandal* for the purpose of ensuring that, as far as possible, elections to the village panchayats were unanimous, so that they did not leave a trail of bitterness, animosity and feuds.

While it might not be possible to adopt this arrangement in all circumstances, a study of it may lead to a satisfactory solution of the problem. It would be worthwhile also to try to apply the personal approach for the solution of social problems. Experienced administrators in rural areas consider that most of the evils in present day village life are the outcome of a long period of enforced unemployment in agriculture, the majority of the people having no work between the cultivating seasons.¹² Therefore, the fundamental remedy lies in a plan for increasing employment and production for every family. If villagers are organised for a co-operative attack on poverty and for raising their standards of living, appreciably through their own efforts, the root causes of village factions will disappear. Here the village panchayat is the only institution which can lay the foundations of village self-government reoriented to suit the requirements of development planning.

DEMOCRATIC DECENTRALISATION

The Second Plan has emphasised the need for creating a well-organised democratic structure of administration within the district in which the Village Panchayats would be organically linked with popular organisations at a higher level. In such a structure, the functions of the popular body should include the entire general administration and development of the area, other than such functions as law and order, administration of justice and certain functions relating to the revenue administration. With a view to examining, among other things, the adequacy of the existing local bodies to take over and perform these functions, the Committee on Plan Projects of the Planning Commission appointed in January, 1957, a Study Team under the leadership of Shri Balwantray Mehta. The Team which submitted its report¹³ in November, 1957, stressed the need for decentralisation of responsibility and power within the district above the village level.

The Team has recommended a three-tier scheme, *i.e.*, the establishment of Village Panchayat, *Panchayat Samiti* and *Zila Parishad*, which should be started at the same time and operated simul-

¹² V. T. Krishnamachari: "Village Self-Government in Development Planning", *AICC Economic Review*, Jan. 1957 (Indian Congress Special Number), p. 38.

¹³ Report of the Team for the Study of Community Projects and National Extension Service (Balwantray Mehta Committee), Vols. I, II & III, 1957.

taneously in the whole district. Elected self-governing institutions called *Panchayat Samitis* should be constituted by indirect elections from the Village Panchayats with adequate financial resources. The jurisdiction of the *Samitis* would be co-extensive with a development block. The *Samiti* should have a life of five years, and should possess the power to scrutinize and approve the budgets of village panchayats. Its functions should cover the development of agriculture in all its aspects, improvement of cattle, promotion of local industries, public health, welfare work, administration of primary schools and collection and maintenance of statistics. It will have full authority without any interference from Government or other officials. As almost the entire development work of rural areas would come under the charge of the *Panchayat Samiti*, the Team recommended that the following resources should be assigned to them: (i) a percentage of land revenue collected within the block, which should not be less than 40 per cent of the State's net land revenue, (ii) cess on land revenue, etc., (iii) tax on professions, (iv) surcharge of duty on transfer of immovable property, (v) rent and profit accruing from property, (vi) net proceeds of tolls and leases, (vii) pilgrim tax, tax on entertainment, primary education cess, proceeds from fairs and markets, (viii) share of motor vehicles tax, (ix) voluntary public contributions and (x) Government grants. In the case of some of these taxes, a compulsory minimum rate should also be prescribed. The State Governments should give the *Samitis* adequate grants-in-aid. All Central and State funds spent in a block area should invariably be assigned to the *Panchayat Samiti* to be spent by it directly or indirectly excepting when the *Samiti* recommends direct assistance to an institution.

To ensure the necessary co-ordination between the *Panchayat Samitis*, a *Zila Parishad* should be established consisting of the Presidents of *Panchayat Samitis*, members of the State Legislature and of the Parliament representing the area and the district level officers. The Chairman of this *Parishad* would be the Collector. The *Parishad* would have the power to examine and approve the budgets of the *Panchayat Samitis*. It would co-ordinate and consolidate the development plans in the blocks. It would also generally supervise the activities of the *Panchayat Samiti*, but it would not be invested with any executive functions. The power of superseding a *Panchayat Samiti* would, however, vest with the Government.

The panchayat should be constituted purely by election with the provision to co-opt two women members and one member each from the Scheduled Castes and Scheduled Tribes. A close link should be established between the *Gram Sevak* (village level worker) and the Village Panchayat by making him the Development Secretary of the *Gram Panchayat*. In addition to taxes, the resources of the panchayat would include grants from the *Panchayat Samitis*. As far as possible, the village panchayat should be used as an agency for the collection of land revenue and should be paid a commission. For this purpose, the panchayats may be graded on the basis of their performance in the administrative and development fields, and only those which satisfy a certain minimum standard of efficiency should be invested with this power. The panchayat should be entitled to receive from the *Panchayat Samiti* a share upto 3/4th of the net land revenue assigned to the latter. Local resources now raised by the village panchayats and spent on the maintenance of watch and ward staff should, in future, be used for development purposes. The budget of the village panchayat will be scrutinised and approved by the *Panchayat Samiti*. The village panchayat will be guided by the *Samiti* in all its activities. No village panchayat should, however, be superseded except by the State Government on the recommendation of the *Zila Parishad*. Separate judicial panchayats should be constituted with larger territorial jurisdiction. The obligatory functions of the village panchayats should include among others, provision of water supply, sanitation, lighting, maintenance of roads, land management, collection and maintenance of records and other statistics, and the welfare of backward classes. It will also act as an agent of the *Panchayat Samiti* in executing any scheme entrusted to it. Persons elected or aspiring to be elected to the local bodies should be provided with some training in administrative matters.

How far these proposals can be successfully implemented in practice is a moot point. The Team itself was conscious of this fact and therefore, suggested a "phasing of the process of the creation of the *Panchayat Samitis*."¹⁴ While the Central Government have approved of the general principle of giving responsibility for development to representatives of people within the district, the

¹⁴ *Op. cit.*, Vol. I, p. 21.

precise manner in which the principle should be applied has been remitted for consideration by the States.

Some of the States consider the block as the most suitable level for decentralisation while the Government of Bombay regards the district as more suitable. It is important to realise that any rigid standardisation of pattern imposed from above would be not only undesirable but also unworkable. The greatest possible latitude must be given to local factors if the organisation and growth of rural democracy are to be real and spontaneous.¹⁵ It should be possible to organise all civic and developmental functions through the reorganised primary panchayats and the service organisations at Taluka levels under the general guidance of district bodies.

It is argued that with the constitution of *Panchayat Samitis* the existing local bodies would become superfluous as the former would perform the functions of the latter with greater efficiency. This argument does not seem sound. In fact, these old and established institutions have gathered certain traditions around them. It is advisable to rehabilitate, or, if necessary, regroup them, rather than create entirely new institutions and take chances of their success. The whole composition of the district council, with limited powers of mere supervision and sanction of budgets, leaves much to be desired. Its composition should be popular. In the absence of strong district units of popular administration, village panchayats will continue to be weak and poorly led. Above all, any tendency towards a fall in efficiency and corruption to creep in as a consequence of devolution of powers and responsibilities and decentralisation of the executive machinery must be scrupulously checked.

Progress

The States of Andhra Pradesh, Assam, Bombay, Bihar, Jammu and Kashmir, Kerala, Madhya Pradesh, Madras, Mysore, Rajasthan, Uttar Pradesh, and West Bengal have, by and large, accepted the proposals of the Study Team for implementation. In Bihar, the Government have established the block as the primary unit of administration for all Government departments and have

¹⁵ See The Pattern of Rural Government — Report of a Seminar — (February 1958), Indian Institute of Public Administration, New Delhi, p. 4 and pp. 7-12.

given enlarged powers to the Block Advisory Committee. A Committee similar to the Block Advisory Committee would be set up to supervise and approve the budgets of the *Gram Panchayats* in the block. In the Uttar Pradesh, *ad hoc* District Councils constituted by indirect election, would replace District Boards. The District Council will handle all the departmental development activities of the Government. Thus it will take over the functions of the District Board, the District Planning Committee and the work connected with Community development. It will also supervise and control village panchayats and municipalities having a population below 25,000. At the block level, the block committees will be the agencies through which the Council will function. The Council will supervise and control their working. There is provision to give a certain percentage of the land revenue (equal to the existing grant-in-aid) to the District Council. In Madras, the local administration of the village will vest in the panchayats. Circle Committees would be set up for a number of panchayats covering a population of 10-15,000 as also *Panchayat Samitis* at the block level and advisory co-ordinating councils at the district level. The village level worker will act as secretary to the Circle Committee. The services of the elementary school teacher would also be utilised in panchayat office work and accounts, on payment of an allowance. The Block Panchayat Union would take over the functions of the district local boards, with the exception of major district roads. The Panchayat Union would be responsible for supervision and control over the panchayats. The Council of the Panchayat Union will sanction the budget. The Circle Committees of the Panchayat Union will have administrative and supervisory powers over the institutions and services maintained by the Panchayat Union in their respective circles. The District Development Councils, established under the Madras District Development Councils Act of 1958, will advise on all services maintained by and all development schemes undertaken by the Government, local authorities and departmental agencies in the district. As a first step, the Government have established Block Panchayat Union and Circle Committees in the North Madurai Block.

In Andhra Pradesh, *ad hoc Panchayat Samitis* would be established in 20 blocks at the rate of one block in each District on

an experimental basis. The development functions of all the departments would be ultimately transferred to this *ad hoc* body insofar as they relate to block areas. A specific list of functions for immediate transfer has been prescribed. The relation of the *Block Samiti* with the Village Panchayat would be of a co-ordinating and advisory character. The question of transfer of functions of District Boards to *Panchayat Samitis* and of bringing District Panchayat Officers into more intimate contact with the Community Development Programme are under consideration. In Assam, the principle of democratic decentralisation will be applied at the level of the block and the sub-division by the establishment of a *Gaon Panchayat* for any declared area, a Union Panchayat for each sub-division and Block Panchayats within the area of a Union Panchayat. The Block Panchayat, an intermediate body, would, for the main part, be the organisational level for planning and implementation of development programmes. The function of Union Panchayat will be mostly supervisory and co-ordinating. It will also allocate funds to the Block Panchayats equitably, besides examining and approving their budgets. In Bombay, the district is the main executive level in respect of development programmes. *Village Panchayat Mandals* would be set up for every district. The present dual functions of supervision and control of the Panchayats exercised by the Collector and the District Local Board would be vested in the *Panchayat Mandals*. The *Panchayat Mandals* will be composed of the Collector, representatives of the *Gram Panchayats*, Chairman of the District School Board, Vice-Chairman of the District Development Board and four other members. In Mysore, panchayats would be established for a population of 1,500 to 10,000. The working of the panchayats would be supervised by Taluka Development Boards. Three-fourth of the members of the Taluka Boards would be elected by the members of the Panchayats and the rest by nomination. The Taluka Boards will function as advisory bodies for the N.E.S. Blocks in their area. The District Development Councils would generally supervise the working of the Taluka Boards and provide guidance or assistance in co-ordinating their work. In addition to the powers to levy taxes and fees, a grant of 15 per cent of land revenue would be given to Panchayats and Taluka Boards and another 10 per cent each would be allotted to Panchayats and Taluka Boards for specific purposes determined by the Government. In most of the States, the nature and extent

of decentralisation to be provided at each level is worked out in detail by the Governments.

If the devolution of power to the Village Panchayat has to be effected, as it should be, the District Boards will need reorganisation. First of all, there should be a more rigid control over their management by means of an expert staff supplied by Government. The executive work should also be taken away from them and entrusted to specialised Government agencies. The Boards should remain more as advisory bodies preparing budgets for and seeing to the administration of the Panchayats in their charge so that they could function as real rural development agencies. The executive functions should be left to the head of the district who should be held responsible for the proper execution of the functions within the limit set out by the budget. The primary duty of the local boards should be to foster Village Panchayats which should be the proper executive body for the villages. There would be ample work for the District Board by way of deciding upon inter-village matters and services. In fact, close co-operation between the two is so indispensable that some attempts to create taluka panchayats as intermediate agencies for control have failed and been given up. What is necessary for the smooth and successful working of these two bodies, is the allocation of responsibility for specific functions between the two, with special emphasis on the reorganisation of the district boards and the devolution of larger powers to the panchayats. Any move in this direction should take full cognisance of the value of correlation between their work.

The real need is the provision of a simple organisation at the base with the decentralisation of functions from the apex level. The village Panchayat should be assisted by service agencies at tehsil and district levels. The service agencies should take over their legitimate functions from the Community Development Blocks, leaving the latter to deal with only N.E.S. activities. The Taluka or Tehsil Unions and District Boards have service functions and the Government should see that they serve well and efficiently. In this way, the panchayat can be a very helpful agency to give effect to schemes of rural development under the supervision, advice and financial help of the district board.

Conclusion

To conclude, wherever Governments have taken sufficient interest in their development, the village people have responded well. The experience so far gained has amply proved that when trusted, the people have produced leaders capable of responsibility for the execution of works of public utility. They have even shown willingness to raise funds and contribute personal labour. The Panchayat should therefore be created in every village and the people set working for their own welfare. That is the main solution of the rural problem. The attempt would fully succeed if people of good-will, officials and non-officials, set themselves whole-heartedly to quicken and mobilise the immense store of energy, good sense and public spirit that is latent in the rural masses. It is essential that everywhere, villagers should be enabled to take their own decisions and contribute as much voluntary labour as they can to the works of benefit to their own families and to the entire community. Responsibility must be entrusted to them to the fullest extent. No solution can be found to the problem of rural betterment unless local co-operation is secured to the maximum possible extent and the support of the best available local leadership is enlisted. The Village Panchayats should function as institutions of local development and should be entrusted with all works of development within their jurisdiction. It is only thus that improvement will become possible on the scale visualised in the planning efforts of the country. It is necessary that they should be assisted by efficient service agencies. The functions entrusted to them are onerous and it will take time for them to deal with all of them satisfactorily. They have to gain experience and they will need assistance and supervision. But an effective local democracy, functioning on the basis of local initiative and leadership is vital for the broad-based development effort which the country is seeking to foster.

CHAPTER XV

THE EDUCATIONAL SYSTEM

The importance of a sound educational system which would continually raise the intellectual standard of the average citizen and thus enable him to co-operate in all developmental activities hardly needs stressing. Nor is it necessary to elaborate upon the paramount importance of technical and higher training which would supply the intellectual leadership for all such activities. The educational system is, to an extent, a reflection of the existing socio-economic structures. But, it also determines the pattern of life for the coming generation as well. It is a recognised axiom of educational policy that the system should be devised so as to guarantee, in the first place, a certain minimum equipment to all citizens. This minimum should be fairly high if an intelligent response on the part of the citizen-body to all the varied stimuli of the modern complex world is expected. Democracy in the political or economic sphere cannot be worked without such an educational background for the people. Secondly, the educational system should qualify the different classes of society for discharging efficiently the functions of their respective stations in life. The more diverse the economic organisation, the greater must also be the differentiation of the educational system which must provide facilities for the development of the varied aptitudes and capacities of the members of the community. Hence, it is necessary to have not only an extensive, in fact, universal system of minimum schooling; it is imperative also that at all stages, the educational system should train up the pupils for the economic, social and civic responsibilities they will have to undertake in due course.

Until Independence, the system of education in India worked on limited objectives, connected mainly with the needs of the administration. Progress even in the matter of literacy was very slow, and there was an excessive literary bias in higher education.

Although considerable advance in widening and strengthening educational facilities has been made in recent years, there is yet a large leeway to be made. There has been so much criticism of the system inherited from the pre-Independence period that it would be superfluous to reiterate these shortcomings here. A reorientation of education is basic to rural reconstruction. While the educational system in the rural areas cannot be completely divorced from that in urban areas, special types of institutions are needed in the rural areas to meet the requirements of training for agriculture. This is true both at the secondary school stage as well as at the higher stage. The problems of primary education would seem to be common to both urban and rural areas, although even here the growing needs of the rural areas for a big, but not costly, expansion of educational facilities should claim precedence.

GROWTH OF EDUCATION

Educational policy for India was formulated in Sir Charles Wood's Despatch of 1854. It was stated in that document that the main object of the educational system in India was to spread western knowledge and science, although it was desirable also to encourage Oriental learning at the collegiate stage; that both English and "vernaculars" should be used as media of instruction at the secondary stage; and that as Government could never have the funds to provide for all the educational needs of the country, the bulk of educational institutions should be left to private bodies—whether missionary or others. It was further stated that the education of the masses should, in future, be regarded as a duty of the State.

As a result of the above Despatch, new Education Departments were created and attempts were made at "improvements" in education. A large number of primary schools was established. In 1921-22, there were 1,79,496 institutions maintained by non-Government bodies as against only 2,946 institutions maintained by Government.¹ By 1955-56, the number of institutions managed by non-Government bodies increased to 2,79,040 as

¹ S. Nurullah and J. P. Naik : *History of Education in India (during British Period)*, 1951, p. 214.

against 87,601 managed by Government, as will be seen from Table I.

TABLE I

NUMBER OF RECOGNISED INSTITUTIONS BY MANAGEMENT : 1955-56

Management					Number of Institutions	Per cent of total	Number of Pupils
Government	..	..	..	..	87,601	23·9	72,50,735
Local Boards	.	..	..	..	1,53,477	41·9	1,50,40,718
<i>Private Bodies :</i>							
Aided	..	..	..	..	1,14,204	31·2	1,03,69,406
Unaided	..	..	..	..	11,359	3·0	12,62,734
Total	..	..	..	..	3,60,641	100·0	3,39,23,593

Source : Education in India, 1955-56, Vol. II, Ministry of Education and Scientific Research, Government of India, Tables III, IV-A and IV-B.

Till the beginning of this century, Government showed no interest in free and compulsory education. It goes to the credit of G. K. Gokhale that, in his striking speeches in the Central Legislative Council, he brought home to Government the need for mass education. Though his ideas were not welcomed at first, since 1920, some efforts were made in the Provinces towards compulsory primary education. There was, however, no proper provision for financing the same; the local bodies could introduce compulsion at their option. In recent years, the local boards have had a predominant share in the administration of primary schools, and private bodies in that of secondary schools.

LITERACY

Table II shows the progress of literacy in India over the last seventy years.

TABLE II
LITERACY IN INDIA

Year	Popula- tion ¹ (Lakhs)	Per cent increase	Literacy (Lakhs)	Percentage of literacy	Per cent increase
1881	1,947	..	68 ²	3.5	..
1891	2,130	9.4	98 ²	4.6	1.1
1901	2,207	3.7	117 ²	5.3	0.7
1911	2,317	5.0	126 ³	5.4	0.1
1921	2,336	0.8	148 ³	6.3	0.9
1931	2,569	10.0	179 ³	6.9	0.6
1941 ⁴	2,958	15.1	..	..	..
1951	3,569 ⁵	14.1 ⁵	600 ⁶	16.6	4.8
Decennial Average		8.3			1.3

N.B.—Data till 1941 refer to British India only.

1. Excluding Burma.
2. Based on statistics contained in 'Literacy in India', by R. V. Parulekar, 1939, p. 11.
3. R. V. Parulekar, *Ibid*, p. 16. These figures exclude Burma.
4. The total literacy figures are not available, but it is stated in the census for 1941 that for the whole population of India there is an increase in literacy of 70 per cent over the 1931 census.
5. Adjusted figures after Partition excluding Jammu and Kashmir. The percentage increase is worked out on the basis of the readjusted 1941 population. See Census of India, 1951, Volume I, Part I-A—Report, p. 122.
6. Census of India, Paper No. 5, 1954 : Literacy and Educational Standards—1951 Census, p. 1.

It will be seen that for the period as a whole, while population increased at an average decennial rate of 8.3 per cent, literacy increased at a rate of 1.3 per cent. According to the census of 1931, only about 13 per cent of the males and 2.3 per cent of the females over five years of age could read and write in any language; and of the 353 million included in the census, only some three million and a half could speak English.² During the decade 1931-41, the proportion of literate population increased

2 Similar information for 1941 is not available.

from 8.3 to 14.6 per cent.³ By 1951, according to the Census data, the proportion of literates had risen only to 20. Four persons out of every five in the age group 10 years and above were illiterate. Out of the 60 million who could write as well as read, over 50 million were without even a middle school standard of education. The number of people who attained that standard was only 9 million. Among the latter, there were only 3.8 million or a little more than 1 in 100 who had passed the higher secondary school standard. Apart from the low percentage of literacy, there was serious disparity in literacy between men and women, the relative percentages being 24.9 and 7.9 respectively. Of the urban population 34.6 per cent was literate, and of the rural population only 12.1 per cent. Among the agricultural classes, the proportion of literates among males was 19.6 and among females 4.5 for every 100 persons. The percentage of literacy on the basis of the livelihood classes was higher in production other than cultivation, commerce, transport and other services. The 'index of literacy', i.e., the percentage of literates aged 10 and over to the total number of people aged 10 and over, was 55 for males and 27 for females in the urban areas. In villages the percentages were 24 for men and 6 for women. The number of women who had passed the higher secondary school standard was only 3 out of every 1,000 women, or 4 out of every 10,000 literate women. Only 1.6 million, (1.4 million men and 0.2 million women) had reached higher standards. Of this, about 0.8 million had received degrees and diplomas, (about 0.7 million among men and 0.1 million among women.)⁴

In 1955-56, educational facilities were available only for 51 per cent of the children of the age group 6 to 11 and 19.2 per cent of the age group 11 to 14 and 9.4 per cent of the age group 14 to 17, as against 42, 13.9 and 6.4 per cent respectively in 1950-51.⁵ The directive of the Constitution lays down that compulsory education should be provided for all children upto the age of 14

³ Review of the First-Five Year Plan, Planning Commission, Government of India, May, 1957, p. 258.

⁴ Census of India, Paper No. 5, 1954: Literacy and Educational Standards—1951 Census, pp. 1-3.

⁵ Report on the Second Five-Year Plan, Planning Commission, Government of India, 1956, p. 501.

within 10 years of the commencement of the Constitution. Despite considerable effort towards this end in the last few years, the leeway to be made is still large.

PRIMARY EDUCATION

The following table indicates the position of primary education at the beginning and at the end of the First Five-Year Plan.

		Number of Insti- tutions (‘000)	Number of Pupils (In lakhs)	Expen- diture (Rs. crores)	Num- ber of Tea- chers (‘000)	Propor- tion of trained teachers to total
1950-51*	.. ..	209·6	183·5	36·48	537·9	58·8
1955-56†	.. ..	278·1	229·2	53·73	691·2	61·2

* Education in India, 1950-51, Vol. II, Tables I and II.

† Education in India, 1955-56, Vol. II, Tables I and II.

Out of the total of 209 thousand primary schools in 1950-51, 176 thousand or nearly 84 per cent were situated in the rural areas. By 1955-56, the proportion of schools located in rural areas had increased to 89·1 per cent. The number of pupils in the primary schools constituted, in 1955-56, 67·5 per cent of the pupils under instruction in all types of recognised institutions and 53·1 per cent of the population of school-going age. The pupils from rural areas formed 76·5 per cent of the total enrolment. The average number of pupils per teacher was 33 in 1955-56. Of the primary schools, 23·3 per cent were managed by Government, 51·1 per cent by local bodies and 25·6 per cent by private agencies. As much as 73·6 per cent of the total direct expenditure on primary schools was borne by Government, the share of Municipal and Local Boards, fees, and other sources being 20·0, 3·3 and 3·1 per cent respectively. In the primary schools, the average annual cost per pupil was Rs. 23·40.

In 1955-56, 69 per cent of the boys and 33 per cent of the girls of the primary age group (6 to 11) were in schools. This gives a total percentage of 51. However, in the age group 11 to 14, the percentage of boys in school was 30 and that of girls 8. The Second Plan target for the provision of educational facilities is for an additional 7·7 million pupils in the age group 6-11, 1·3 million in the age group 11-14, and nearly 8 lakhs in the age group 14-17

during the five-year period. In 1956-57, the number of additional pupils for whom school facilities were available was 20 lakhs in the age group 6-11, 2.7 lakhs in the age group 11-14 and 2.6 lakhs in the age group 14-17. The position indicates that the progress in regard to the boys of the age group 6 to 11 is satisfactory. The progress in respect of the age group 11 to 14 has been inadequate. In both the age groups the education of girls has lagged behind. An immediate problem is one of removing the wastage which exceeds 50 per cent at the primary stage.⁶

All the States have accepted under the directive of the Constitution the principle of compulsion at the primary stage. Table III shows the position in regard to compulsory primary education in 1955-56.

TABLE III
COMPULSORY PRIMARY EDUCATION IN THE STATES : 1955-56

State	Number of Schools where compulsion was in force		Number of Pupils under compulsion ('000)	
	Towns	Villages	Towns	Villages
Andhra	1,225	1,550	191	178
Assam	116	3,587	19	268
Bihar	627	9	61	neg
Bombay	3,478	14,600	752	1,498
Madhya Pradesh	406	411	91	43
Madras	2,631	1,923	538	308
Orissa	18	5	2	neg
Punjab	247	2,181	62	186
U. P.	2,285	543	396	62
West Bengal	83	2,914	9	339
Hyderabad	31	537	6	39
Madhya Bharat	835	730	68	34
Mysore	207	1,402	27	93
Pepsu	—	303	—	2
Travancore-Cochin	178	1,177	143	442
Ajmer	—	469	—	25
Delhi	184	300	77	33
Vindhya Pradesh	113	913	25	72
All-India	12,664	33,554	2,467	3,622

Source : Education in India, 1955-56, Table XXIV.

⁶ Report on the Second Five-Year Plan (1956), p. 503.

The number of pupils under compulsion constitutes less than 14 per cent of the total primary school-going population. Considering that only 53·1 per cent of the people of school-going age (including those compelled) actually go to schools, the extent of compulsion exercised in practice is very much below requirements. Bombay stands far above other States in this respect.

Reorganisation of Primary Education

In view of the wastage and poor return from the existing basic structure at primary level, the policy now is to reorientate the system of education on basic lines and expand the existing facilities. As far as possible resources are to be diverted to basic education and the improvement and re-modelling of the existing primary schools on basic lines so that it would promote the development of a uniform pattern of education and thus avoid the unhealthy rivalry between basic and ordinary primary schools.

The work in the direction of reorganising the pattern of primary education on basic lines began only with the implementation of the First Five-Year Plan. In the matter of approach and the curricula of the basic schools there have been differences between States which have caused delay in developing primary basic schools. The Central Advisory Board of Education have given a clear directive (1952) that "a system of education cannot be considered as basic education in the real sense unless it provides an integrated course including both the junior and senior stages and places adequate emphasis on craft-work in both its educational and productive aspects." Under these directives a broad framework of basic education has been worked out. This should remove the existing confusion and pave the way for the necessary adjustment of the present pattern of education in the primary stage.

BASIC EDUCATION

With a view to replacing the existing system of education by one which is more constructive and human, and which answers better to the needs and ideals of the country, the Wardha Education Committee (1937) prepared a scheme of education which should be imparted through some craft or productive work. The

scheme aims at rural national education through village handicrafts. It is expected that village children would be educated in the villages so as to draw out all their faculties through some selected village handicrafts in an atmosphere free from superimposed restrictions and interference.⁷ The system of education includes basic crafts, such as spinning and weaving, carpentry, agriculture, and fruit and vegetable gardening. It also comprises social studies whose objectives are :—

- “1. To develop a broad human interest in the progress of mankind in general and of India in particular.
2. To develop in the pupil a proper understanding of his social and geographical environment; and to awaken the urge to improve it.
3. To inculcate the love of the motherland, reverence for its past and a belief in its future destiny as the home of a united co-operative society based on love, truth and justice.
4. To develop a sense of the rights and responsibilities of citizenship.
5. To develop the individual and social virtues which make a man reliable associate and trusted neighbour.
6. To develop mutual respect for the world religions.”⁸

Under the scheme, the children are taught the mother tongue, mathematics, general sciences, drawing, music, and Hindustani. The scheme was not meant to be a mere party slogan but an adaptation to Indian needs of educational changes which have won acceptance in Europe and America and have revolutionized the elementary stage of education in England. Attempts were made in several States to introduce the scheme.

The suggestions of the Report on “Vocational Education in India” submitted by Messrs. A. Abbott and S. H. Wood (1937),

⁷ Mahatma Gandhi's Foreword to Basic National Education.

⁸ *Ibid*, pp. 19-20.

were on similar lines. It was suggested that the education of children in primary schools should be based more upon the natural interests and activities of young children and less upon book learning; the curriculum of rural middle schools should be closely related to the children's environment; and that Indian languages should, as far as possible, be the medium of instruction throughout the high school stage. It was further suggested that manual work should be an essential part of the curriculum of every school, that more systematic attention should be paid to the teaching of art, and that physical education should not be limited to formal physical training and organised games, but playgrounds should be used for creative purposes.

The object of basic education is not merely the production of craftsmen able to practice some crafts mechanically but rather the exploitation for productive purposes of the resources implicit in craft work. The requirement under the system is that productive work should not only form a part of the school curricula—in craft side—but should also inspire the method of teaching all other subjects. As Mahatma Gandhi, the proponent of the scheme, observed: “every handicraft has to be taught not only mechanically as is done today, but scientifically that is to say the child is to learn the why and wherefore of every process.” The main outline of the seven years' course of basic education includes: (1) the basic craft; (2) mother-tongue; (3) mathematics; (4) social studies; (5) general science; (6) drawing; (7) music and (8) Hindustani.

The importance of basic education in the scheme of planning for rapid economic development is well recognised since Independence. The Inter-University Board recommended in 1955 to all the Universities and the Boards of Secondary Education to re-organise the system of education as suggested by the Secondary Education Commission and integrate it with the basic education scheme so that the whole reform of education can be completed by 1961 to suit the needs and requirements of India. The Tenth All-India Basic Education Conference (1954) also recommended unanimously the inclusion of '*Bhoodan*' work as part of the *Nai Talim* from the pre-basic university stage.

The following table gives the progress so far and the targets set for the Second Plan period.

						1950-51	1955-56	1960-61
Schools	..	..	..	..	..	1,751	12,455	38,400
Enrolments	..	..	..	..	..	1,85,000	11,00,000	42,24,000
Training Schools	..	..	..	..	..	124	482	729

The number of children going to basic schools still accounted for less than 1 per cent of the total number of children in the elementary stage in 1950-51. The proportion increased to 4 per cent by the end of the First Plan, and it is expected to rise to 11 per cent by 1960-61. There has been greater progress in the provision of facilities for training basic teachers.

ADULT EDUCATION

Many children in India leave the school before attaining the minimum standard required for literacy, and lapse into illiteracy as they grow up. Attempts have been made in recent times to provide those whose formal education either has not started or has ended prematurely some facilities for instruction and access to literature. At the beginning of the present century, the teaching of illiterate adults was taken up by a few enthusiastic people in the Punjab, Madras, Maharashtra, Gujarat and other parts of the country. Missionaries have also actively helped in adult literacy work by furnishing literature and conducting classes. With the inauguration of Provincial Autonomy, the Provincial Governments organised a drive against adult illiteracy. Strenuous efforts were made by various Provinces and States for the education of adult illiterates. The number of schools for adults and their enrolment at the beginning of the campaign in 1938-39 were 4,733 and 1,44,983 respectively.

The results achieved since then, while commendable, are not commensurate with the magnitude of the problem. For the purpose of teaching adult illiterates, some special literature has been created with a basic vocabulary of nearly 2,000 words. Lists of words frequently occurring or used by illiterates in conversation

are prepared and tabulated. Short articles containing interesting, vital and useful facts were written for the benefit of villagers. In a few cases, publishing houses sent salesmen to sell literature in villages, and village book stores were opened. Village libraries and reading-rooms were also provided. All this, however, amounts to a drop in the ocean.

SOCIAL EDUCATION.

'Social education' denotes an all inclusive programme of community uplift through community action. The programme under the new approach of social education embodies mainly five related stages of work which includes literacy; knowledge of the rules of health and hygiene; training for the improvement of the economic status of adults, a sense of citizenship with an adequate consciousness of rights and duties; and healthy forms of recreation suited to the needs of the community and the individual. This programme is supported through libraries opened with State help supplemented by locally raised resources. The object of the entire programme is to correlate the relevant knowledge at every stage with a gainful activity and the social and economic needs of the villagers.

In the implementation of this programme various agencies in the development sphere, *viz.*, the National Extension Service, Social Welfare Extension Projects, the Projects under Sarva Seva Sangh, the Bharat Sevak Samaj, Co-operative Movement, Village Panchayats, etc., would be co-ordinated. In addition to this, a planned programme has been initiated for all the stages, as set out above, for which specially and properly trained work-staff are made available. In the last year of the First Plan, the Ministry of Education established a National Fundamental Education Centre for training social education organisers and for continuing study and research in problems relating to social and basic education. In a number of States, the departments of social education have also been strengthened.

Under the new approach to the problem of social education as distinct from adult education, the magnitude of the task ahead, in the light of the available resources, is really great. The total expenditure on social education increased from Rs. 84.67

lakhs in 1950-51 to only Rs. 96.86 lakhs in 1955-56. The average annual expenditure visualised in the First Five-Year Plan was Rs. 3.02 crores. However, if in the next 10 years, the object is to make everyone literate and also give in addition a minimum knowledge of social education in the larger sense of the term, an average annual expenditure of Rs. 27 crores will be required.⁹

As regards achievement, in 1955-56, there were 671 schools and 45,420 literacy centres or classes for adults giving instruction to 21,063 and 1,257,764 adult population respectively. Nearly 4.9 lakh adult males and 53,987 adult females were made literate.¹⁰ During the First Plan period, an 'Integrated Library Service' was introduced at 29 centres with a view to integrating the work of the libraries in these areas with that of community centres and other educational institutions in the area. Steps have also been taken for the improvement of the general library service. There were nine State Libraries and 150 District Libraries at the end of March, 1956. Thus, one out of every two districts in India had district libraries.¹¹ There is also the National Book Trust set up by the Government of India in 1957 to encourage the production of good literature and to make books available at moderate prices not only to libraries and educational institutions but also to the public in general.

Various activities under local leadership, such as youth clubs, women's clubs, children's clubs, farmers' clubs, etc., are in the process of being developed. However, social education as an organised and systematic activity directed to specific purposes is still a new field of work, and only a beginning can be said to have been made in this direction.

SECONDARY EDUCATION

In 1955-56, there were 32,568 secondary schools (28,648 for boys and 3,920 for girls). Of these, 21,589 or 66.3 per cent were

⁹ Estimate by the Bureau of Education: Proceedings of the 16th and 17th (Special) Meetings of the Central Advisory Board of Education, Pamphlet No. 79, 1951, p. 113.

¹⁰ Education in India, Vol. II, 1955-56, p. 108.

¹¹ Ministry of Education and Scientific Research: Ten Years of Freedom, Publication No. 294, Government of India, Delhi, 1957, p. 26.

in rural areas. The pupils under instruction in secondary schools were 85,26,509 (66,57,486 boys and 18,69,023 girls) or 25.1 per cent of the total in all institutions. The pupils from rural areas in the secondary schools constituted 54.3 per cent. On an average, there are three secondary schools for every 55 villages. The average cost for each pupil in a secondary school increased from Rs. 58 a year in 1950-51 to Rs. 62.20 in 1955-56. In the case of secondary schools, Government played a predominant part meeting 46.5 per cent of the total expenditure while fees, Local Boards and other sources contributed to the extent of 37.8, 6.8 and 8.9 per cent respectively.¹²

The Secondary Education Commission (1953) reviewed the problems of secondary education and observed that the curricula and the traditional methods of teaching at the secondary stage did not give students sufficient insight into the everyday world in which they lived; these schools failed to train the whole personality of the pupil. The present system was too narrowly based and, instead of serving as a terminal stage, was mainly an appendage to University education. For the majority of pupils it seemed to lead to a dead end, for they were fitted neither for higher education nor, owing to the comparative absence of vocational training at the secondary stage, for a gainful career. There was also an excessive emphasis on the study of English language which led to the neglect of other subjects. The Commission made proposals for bringing about greater diversity and comprehensiveness in educational courses which would include both general and vocational subjects. They were not in favour of any sharp division between general or cultural education and practical or vocational and technical education. It was visualised that in a total school duration of 11 years following the 4 or 5 year period of primary or junior basic education, there would be a middle or senior basic or junior secondary stage of 3 years and a higher secondary stage of 3 or 4 years. The first Degree course would thus be of 3 years' duration. The Commission also recommended the establishment of multipurpose schools, of technical schools, either separately or as part of multipurpose schools and of special facilities for agricultural education in rural schools.

12 Education in India, 1955-56, Vol. II, Table II.

The recommendations of the Commission have been broadly accepted and the pattern of reorganisation for secondary education has followed the above lines initiated as from 1953-54. The All-India Council for Secondary Education set up by the Government of India in August, 1955 is entrusted with the implementation of the recommendations of the Secondary Education Commission. With the provision of Rs. 51 crores in the Second Plan as against Rs. 22 crores in the First, the reorientation of secondary education will be carried a step further. During the First Plan, about 334 multipurpose schools were established. In the Second Plan, the target is 837, of which 117 multipurpose schools were established in 1956-57.¹³ Similarly, the number of high and higher secondary schools will increase from 10,600 to 12,000. About 1,150 high schools would be converted into higher secondary schools in order to develop agricultural education at the secondary stage in rural areas. An additional 200 agricultural courses in rural secondary schools would be provided. In the Second Plan, the number of pupils at the secondary stage is expected to increase from 2.3 million to 3.1 million. Ninety junior technical schools would also be established to impart workshop training for a period of 3 years to boys of the age group 14 to 17. At the end of the First Plan, about 56 per cent of the staff of secondary schools consisted of trained teachers. In the Second Five-Year Plan period, the proportion of trained teachers is expected to increase to 68 per cent.

The question of the manner in which basic education and the scheme of reform for secondary education should be related has also been examined by the Secondary Education Commission. The object of the reform in general is to integrate secondary education with basic education at the primary stage and adapt it to the socio-economic needs of the pupils for whom it is designed. Secondary education should provide sufficient training and education for most of the pupils to make their careers. It should also develop qualities of leadership at what might be called the intermediate level.

¹³ Appraisal and Prospects of the Second Five-Year Plan, Planning Commission, Government of India, 1958, p. 92.

UNIVERSITY EDUCATION

There were 32 Universities with a total of 746 Arts and Science Colleges (including 34 research institutions) at the end of March, 1956. The number of students receiving general education at the University stage was 5,75,271 and accounted for 1.7 per cent of the total number of pupils under instruction in all institutions. The total estimated enrolment at the end of the First Five-Year Plan was 7,20,000. The candidates qualifying each year in degree and higher examinations in arts and science have risen during the five-year period from 41,000 to 58,000. The average annual cost per pupil in arts and science colleges (including Universities) increased from Rs. 371.31 in 1950-51 to Rs. 385.40 in 1955-56. Government contributed 40.9 per cent of the expenditure, Local Boards 0.05 per cent, fees 45.2 per cent and other sources 13.8 per cent.

The University Education Commission (1948-49) examined the entire question of reforming university education and suggested comprehensive and far-reaching reforms. The Commission stressed the need to reconstruct and strengthen the examination system by incorporating modern scientific methods of educational testing and appraisal as also the need to recruit men to the public services through competitive examinations without insisting upon the possession of an University degree.¹⁴ The Panel on Education of the Planning Commission has advocated, as recommended by the Central Advisory Board of Education, the starting of pre-University courses followed by a three-year degree course within a phased programme of transition not extending beyond 1965. In accordance with the recommendations of the University Education Commission, measures have been taken by the University Grants Commission which was established in November, 1953, to improve the quality of the present college and University education and to reduce wastage because of inadequately equipped students joining the Universities and failing to qualify. These measures include organisation of tutorials and seminars and pro-

¹⁴ The Public Services (Qualifications for Recruitment) Committee constituted by the Central Government in April, 1955, under the chairmanship of Dr. A. Ramaswamy Mudaliar reported in 1957 that a University degree should not be insisted upon for recruitment to public services except for educational, technical and higher executive services. No action has yet been taken on this report.

vision of improved equipment by way of buildings, laboratories, libraries, hostel facilities, and stipends for meritorious students, scholarships for research, etc. Several Universities have already started pre-university and three-year degree courses. In the Second Plan period, seven new universities are to be established. The introduction of diversified courses at secondary level is expected to check the rush of students to arts colleges.

The universities have been devoting increasing attention to research, and some valuable work is being done in their post-graduate departments. The standard of research is perhaps not as high as it should be, mainly because of inadequacy of staff and equipment. It is obvious that if education is to produce the best results, it would be necessary to endow universities more liberally than has been done hitherto. The unsatisfactory character of the present position is indicated by the fact that although some studies in rural problems have been carried out under them, there is no adequate provision for the teaching of and research in agricultural economics in many of the Universities.

A total provision of Rs. 57 crores has been made for University education in the Second Plan, as against Rs. 15 crores in the First Plan. The greater part of the expenditure will be on consolidation and increased provision for technical and scientific education in the universities. Besides, a sum of Rs. 4.6 crores has been specifically provided for agricultural education and Rs. 10 crores for health education at the university and higher stages.

PROFESSIONAL AND TECHNICAL EDUCATION

Till 1904, vocational education in India was organised to meet the needs of public administration. Private effort, so prominent in general education, took little initiative in technical education. The Government Resolution of 11th March, 1904, may be said to be the turning point in this respect. The Extension Departments of Universities also contributed their part in this sphere.

There were, in 1956, 346 professional and technical education colleges and 3,067 schools imparting vocational and technical education. The number of pupils enrolled in these institutions

was 4,28,526, forming 1·3 per cent of the total number of pupils under instruction. The direct expenditure on these institutions was Rs. 12·43 crores. No State remains without its own facilities for the first degree and diploma courses in the basic branches of engineering. With the exception of Jammu and Kashmir, every State has at least one engineering college and one polytechnic. In the field of technical education, the requirements for engineering and technological personnel are on a scale far exceeding the capacity of existing institutions. Since 1947 though much progress has been made, the problem requires long-term planning. There is a chain of eleven National Laboratories and Central Research Institutions, set up by the Council of Scientific and Industrial Research of the Ministry of Natural Resources, for dealing with problems of research in general, testing and standardisation of new products and the provision of expert advice. They also offer facilities to scientists, universities, industry and others to carry out or complete investigation independently. The Indian Institute of Technology at Kharagpur and the Indian Institute of Science, Bangalore, offer facilities for training and research in a wide range of subjects. The proposed establishment of three more higher technological institutes in Bombay, Madras and Kanpur would carry the provision of higher technological education and research a step further.

A review of the position of technical education at the beginning and at the end of the First Plan showed that the number of institutes offering post-graduate courses and research facilities have increased from 8 to 18, institutes offering degree or equivalent courses from 53 to 60, institutes offering diploma courses from 81 to 108. Admissions to institutions and out-turn of graduates and diploma holders showed an increase of 50 per cent since 1949-50. Compared to 1947, the increase is three-fold. With the implementation of the different schemes for the expansion of technical education under the Second Five-Year Plan, there will be provision for an annual admission of 13,000 students for degree courses and 25,000 for diploma courses by 1960-61. On the basis of the present admissions, an out-turn of 4,600 graduates and 5,220 diploma holders is expected from 1958-59. Qualitative improvement in the standards of instruction has also been kept in view in the re-organisation of technical education. Particular attention has been

given to the development of facilities in special fields such as Management Education and Training, including industrial engineering, industrial administration and business management, etc. The scheme has been implemented in seven selected centres and a Board of Management Studies has been set up for bringing about co-ordinated development of facilities for training in these subjects in association with Industry and Commerce. An Administrative Staff College has been established in Hyderabad for training executives in the principles and techniques of organisation, administration and leadership in civil life. Four Regional Schools of Printing in Bombay, Madras, Calcutta and Allahabad, a School of Town and Country Planning at Delhi and an organisation for the promotion of scientific management are being established. In the Second Plan, a provision of Rs. 48 crores has been made for technical education. The Ministry of Labour has also a programme for increasing the output of craftsmen by about 20,000 per annum to meet the increasing demands for skilled workers during the period.

AGRICULTURAL EDUCATION

Since Independence considerable thought has been given to the aims and objectives of education in the rural areas and the nature of institutions which should be developed to fulfil these objectives. Prior to Independence, this aspect of education did not receive as much attention as it deserved. But a beginning was made and some 21 institutions for higher education in agriculture were in existence by 1947-48. The establishment of the Imperial Council of Agricultural Research in 1929, following the recommendations of the Royal Commission on Agriculture was an important landmark in the progress of higher education and research in the field of agriculture.

The students trained in agricultural institutes which had come into existence before Independence were generally reluctant to go back to the farms; they sought jobs in the Departments of Agriculture of various State Governments or got employment in local municipalities or corporations. With the advent of planning for economic development and in the context of the community development programme, a radical change in the educational system in the rural areas has become an imperative need. This was re-

cognised first by the University Education Commission (1949) which recommended a complete reorganisation of the system of agricultural education. Corresponding to three main aspects of agricultural education, *viz.*, teaching, extension and research, the University Education Commission formulated three definite objectives of a reorganised system of education: (1) training of farmers' sons who will go back to their farms and work on them more efficiently; (2) training of persons for carrying the results of modern agricultural research to the peasant through extension work and demonstration; (3) training of persons for carrying on the work of research, developmental and fundamental, relating to problems of agriculture and animal husbandry. The institutions which the Commission recommended were: basic and post-basic schools to take care of the first objective; farm institutes situated on model farms and associated with residential high schools to take care of the second objective; and, rural universities for higher education.

The University Education Commission was the first since Independence to review the system of agricultural education. A number of committees and commissions have followed to give more concrete shape to the recommendations of the Commission. The Higher Rural Education Committee, which reported in 1955 took the view that rural institutes which would train rural youth for effective leadership of the community should be established as distinct from rural universities. The institutes would provide mainly (a) facilities for higher studies to students who had completed their post-basic or higher secondary courses; (b) certificate courses in subjects such as rural hygiene, agricultural and rural engineering and (c) comprehensive teaching-cum-extension programmes. They are expected to help in the process of "breaking down economic and geographic barriers between the rural and urban population, between culture and work, between the humanities and technology and between the practical and the ideal."¹⁵

Soon after the Higher Rural Education Committee reported, the Joint Indo-American Team on Agricultural Research and Education (1955) reviewed the position afresh. They took the

¹⁵ Report of the Committee on Higher Rural Education (1955), p. 9.

view that rural institutes were a half-way house between the rural universities envisaged in the University Education Commission's report and the *manjri* type of vocational agricultural schools. In the opinion of the Team the two basic types of institutions which should be established all over the country are the vocational schools and rural universities. Each district should have a school of the *manjri* type and each State should have a rural university.

This line of thinking also appears to have been endorsed by the Committee on Rural Education which reported in 1958. This Committee reviewed the rural institutes, the *manjri* type of schools, the basic agricultural schools and *janata* colleges. The Committee made certain far-reaching recommendations regarding reorganisation of rural education with a view to developing a system of education in the rural areas in which the farmers' requirements figure more prominently than has been the case so far. The Basic Agricultural Schools have suffered from the fact that education in these schools has been too 'job-oriented', so that the students rarely acquire a grasp of agricultural theory and techniques on the basis of which they could build up further learning through their own work. The Committee has criticised the view that the Basic Agricultural Schools and Extension Training Centres should be combined into one institution. The confusion between education and training which would result from such a combination was, in their view, likely to prove harmful to the long-run interest of developing a proper system of education. The Extension Training Centres are designed primarily to produce *grama-sevaks*. The Committee has, therefore, recommended that the establishment and continuance of Agricultural Schools should not be based on the number of *grama-sevaks* required. It has also suggested integration of the agricultural course in multipurpose Higher Secondary Schools and the Agricultural Schools. The view of the Committee in regard to the *janata* colleges is that they are not fulfilling sufficiently their essential purpose. These institutions are expensive and do not attract adult villagers who are gainfully employed. The correct approach to mass adult education would be to operate through the community development programme rather than to set up *janata* colleges. The Committee has also endorsed the view of the Joint Indo-American Team that rural

institutes will have ultimately to be developed into rural universities of the type envisaged by the University Education Commission.

It may be mentioned that progress in regard to the setting up of the different kinds of institutions reviewed by the Committee on Rural Education has not been rapid enough. By 1955-56, there were in all 77 agricultural schools in the whole country. Nearly half of these were located in Bihar and Bombay (the '*manjri*' type schools). The total number of pupils in these schools was not more than a little over 5,000. The Second Plan envisaged a programme of setting up some 150 schools of the *manjri* type with a view eventually to have one school in each of the 310 districts in India. There is also a proposal to establish 10 rural institutes and a provision for Rs. 2 crores was made for the purpose. Some 30 institutions have so far been considered for being converted into rural institutes. A Council on Rural Higher Education has been constituted for implementing the programme of setting up of rural educational institutions.

It is clear from the above review of post-Independence thinking on the subject that we are still experimenting in the field of agricultural education and a clear-cut policy is yet to emerge. The implementation of the programmes in the Second Five-Year Plan has suffered to some extent because of lack of such a policy.

While it would be futile to seek a uniform pattern for the country as a whole, in view of the regional differences in needs, it is nonetheless important that the Centre should be in a position to give effective guidance to the States in regard to policy for agricultural education. In the evolution of such a policy, certain basic considerations have to be kept in mind.

The first of these is the need for a change in outlook regarding the ultimate purpose of education in the rural areas. It is clear that at the present stage of industrial development of the country it is not possible to have job opportunities in the urban sector for all the educated people. Excessive urbanisation is undesirable on social grounds. And yet the normal tendency at present is

for educated people from rural areas to crowd into the towns seeking job opportunities in commerce, industry or government. This tendency can be ascribed, at least partly, to defective education. The experiment with the *manjri* schools in the State of Bombay has proved to be fairly successful and the establishment of such schools in other parts of the country will go a long way towards checking the migration from rural areas.

The second important consideration is to distinguish between the growing needs of personnel for the Community Development Administration on the one hand and the training, on the other, of the rural youth in the improved techniques of farming. Here also the tendency at present is for the students trained in basic and post-basic schools to seek jobs as *talatis*, *patwaris* or as *grama-sevaks*. The danger of the entire system being geared to the limited requirements of the extension services has to be avoided.

Thirdly, in the field of higher education and research, the idea of a rural university as formulated by the Joint Indo-American Team needs to be effectively implemented. Such a university with its colleges of agriculture, veterinary science, home science, applied arts and science, technology (and if possible engineering) can meet the major needs of higher education in the rural areas. There is no university in India at present which can answer to such a description, except perhaps the Banaras Hindu University. A number of questions will arise as to the degree of autonomy which such universities should have, their relationship with the departments of agriculture of State Governments and the degree of control which should be exercised by the Central Government. It is clear, however, that while financial control from government will be inevitable, in the matter of selection of syllabus, prescription of qualifications for teaching, examinations and the rest, the governing bodies of the universities will have to be given almost complete autonomy. A close collaboration between the universities and extension agencies would be mutually beneficial.

The rural universities can become the future focal points of research in agriculture. At present the Indian Council of Agricultural Research and the central research institutes such as the Central Institute of Food Technology, the Central Rice Research

Institute, the Central Sugarcane Research Institute, etc., are the main agencies which are engaged in agronomic research. In the field of agricultural economics, some of the existing agricultural colleges, institutes and university departments carry out projects approved and financed by the Research Programmes Committee of the Planning Commission or the Agricultural Economics Committee of the Indian Council of Agricultural Research. The review of research in agricultural economics carried out by the two U.S. economists, Dr. J. D. Black and Mr. H. L. Stewart showed that the current state of research left much to be desired. Much of the literature which emerges from the research currently being done is of a descriptive character. There has, undoubtedly, been considerable advance in recent years, but it is essential to provide for expansion of facilities for higher education—and particularly for training of research personnel who will form the nucleus for further research work in the field of agriculture and rural reconstruction.

CONCLUSION

It is clear from the foregoing brief review that the educational system in India is in a process of transition, and every effort is required to accelerate and complete the process. The Committee on the Ways and Means of Financing Educational Development in India estimated that a national system of education providing education for 100 per cent of the children of the age group 6 to 14, secondary education for 20 per cent of those coming out of the first stage, university education for 10 per cent of those passing out of high schools, technical education on a conservative limit, etc., when it came into full operation would require an annual expenditure of Rs. 400 crores. Besides, the basic schools and high schools would alone require Rs. 200 crores to train 27 lakhs of teachers that will be required. The finance for buildings alone would amount to Rs. 272 crores.

Under the First Five-Year Plan, a provision of Rs. 169 crores for educational development was made. In the Second Plan, the original provision was Rs. 307 crores; subsequently, it has been revised to Rs. 285 crores. The inadequacy of this provision when compared to the requirements is obvious. The targets aimed at under the First Five-Year Plan were that educational

facilities should be provided for at least 60 per cent of all the children of school-going age (6 to 11) and these should develop so as to bring as early as possible children upto the age of 14 into schools. This was considered as an integral part of the programme of providing basic education. The percentage of girls of the school-going age was expected to go up from 23·3 per cent in 1950-51 to 40 per cent in 1955-56. At the secondary stage the target was fixed at 15 per cent of the children of the relative age group. The percentage of girls was expected to go up to 10. In the field of social education at least 30 per cent of the people and 10 per cent of the women within the age group of 14 to 40 were expected to receive the benefit of the facilities in this regard. But, the achievements are short of targets. The Second Plan aims at providing educational facilities for no more than 62·7 per cent of the children in the age group of 6-11 and 22·5 per cent in the age group of 11-14 by 1961. The objective of bringing the benefits of free and compulsory education to all children below the age of 14 by 1961, as laid down by the Constitution, has not materialised. Meanwhile, it has been urged that as an immediate objective, children upto the age of 11 should be brought under the free and compulsory education by 1965-66.

For adapting and extending the education system in keeping with the requirements of a planned economy, a heavy responsibility lies on the Central, State and Local Governments. The methods and techniques of teaching need improvement. The scales of pay of teachers at all stages require to be improved. Technical and vocational training facilities call for urgent expansion. The colleges and universities need larger funds for staff and equipment. The resources available for all these purposes are limited. It is inevitable to an extent that in the early stages of planning, productive investment gets a priority over social development, including education. It has, nevertheless, to be borne in mind that the education and training of men—and women—is the very basis of economic and social progress. Developmental planning aims, in the last analysis, at making life richer and ampler for the individual, and it is only a truism to say that investment in education and the improvement of the intellectual and moral standards of the mass of citizens is, in a vital sense, the most productive of all investments.

CHAPTER XVI

COMMUNITY DEVELOPMENT MOVEMENT

Concept and Approach

No programme of economic development in India would be meaningful unless it reaches the villages where the mass of the population lives. Community Development and Rural Extension are designed to carry the message of development to the villages and to make them active participants in the tasks of development. Only by creating an active enthusiasm for development among the people can continuing and accelerating growth on a democratic basis be ensured. The First Five-Year Plan stated: "Community Development is the method and Rural Extension is the agency through which the Five-Year Plan seeks to initiate a process of transformation of the social and economic life of the villages." The programme which was initiated in 1952, has four basic aims: (a) creation of a progressive outlook among the rural population, (b) inculcating habits of co-operative action, (c) securing increased production and (d) promoting increased employment.¹ It seeks to combine in itself the welfare and the developmental aspects of economic change. Active participation of the people, with the advice given by governmental agencies, is the very foundation of Community Development. While the National Extension Service is concerned mainly with "interesting the cultivator in ways of improving the techniques and organisation of farming and helping him to adopt these,"² Community Development aims at a broad-based and co-ordinated development of all aspects of village life including rural industries and social services like education and health and the development of transport and communications.

EARLIER ATTEMPTS

The basic idea underlying intensive development aimed at securing co-ordinated development of rural life as a whole in India

¹ P. E. O.: Evaluation Report on the First Year's Working of Community Projects, May, 1954, p. 45.

² *Ibid.*, p. 23

is not new. As early as 1928, the Royal Commission on Agriculture stressed that no lasting improvement in rural life is possible if aspects of it are treated in isolation.³ Even under the Reforms of 1919, the Provincial Governments realised the futility of haphazard attempts for rehabilitating the villages, and drew up plans for taking concerted action in that direction. However, they felt handicapped in carrying out the plans for want of finance. Under Dyarchy, the nation-building departments were under popular ministers but the finances were controlled by the Executive and much progress could not be made. The work under Provincial Governments, however, received a stimulus by the announcement in 1935 of special grants by the Central Government to the extent of Rs. 2 crores for assistance towards approved plans for the betterment of villages. The introduction of provincial autonomy and assumption of office by popular ministries in 1937 added fresh vigour to the efforts that were being made in this direction. Definite plans were drawn up in the Provinces for carrying out the work of rural reconstruction to be financed out of Government of India grant as well as by contributions from the provincial exchequers. Some of the progressive Indian States too had their own plans drawn up for carrying out rural reconstruction activities.

In all the Provinces and princely States where reconstruction plans were drawn up, co-ordination among the various nation-building departments was aimed at. With this end in view, either a special minister was appointed or departments and boards were organised. Co-operative organisations such as better living societies, taluka development associations, better farming societies, rural development societies and Village Panchayats were being used for carrying out the work. Considerable changes were made in the method of approach to the subject, and attempts were made to concentrate activities so that definite results could be achieved. However, enthusiasm in the work waned to a marked extent in several provinces owing to the resignation of popular ministers and the pre-occupation of the Government with war work, except, of course, for the "grow more food" campaign which aimed at raising the yield from land to meet the increased demand due to the war.

Besides, a few non-official agencies have also made attempts to improve the conditions of village life. Examples of non-official

³ Report, pp. 672-73.

efforts at rural reconstruction are found in Mahatma Gandhi's Wardha Scheme of education, Poet Rabindranath Tagore's rural reconstruction scheme at Sriniketan, the rural reconstruction centre in the former Baroda State, the Sevagram Ashram in Madhya Pradesh, the Firka Development Scheme in Madras, the Sarvodaya Centres in Bombay and in Etawah and Gorakhpur in Uttar Pradesh, Spencer Hatch's scheme at Martandum (Trivandrum), the work by various Christian Missions, etc. However, rural reconstruction activities before the attainment of Independence were confined only to a few items. Moreover, rural reconstruction activity among the villagers themselves did not come into prominence. The average cultivator was not brought actively into a co-operative effort at improvement; the departments concerned failed to organise the rural people themselves for a collective endeavour. The poor response to the "grow more food" campaign illustrated the weakness of the organisation. If there had been peasants' organisations, associations and chambers to inspire their confidence and claim their loyalty, the results would undoubtedly have been better.

Government's efforts to bring about improvement in rural areas were directed through several Development Departments such as Agriculture, Co-operation, Health, Education, etc. These, however, worked independently of one another and without a sense of common objective. The activities of these Departments were also not linked with those of the Revenue Offices of the area or with the local bodies, which, under the law, are responsible for some of the welfare services. Since Independence, there has been a growing interest in national economic progress, for which agricultural improvement is increasingly realised to be essential. The Fiscal Commission, set up by the Government of India in 1949, reported that comprehensive schemes for agricultural reconstruction to ensure increased production and a substantial rise in the standard of living should cover all sides of rural life. The Commission felt the greatest need for the setting up of an extension agency with the object of bridging the gap between research and the practices of producers, similar to those which have been found so valuable in the U.S.A., U.K., etc.⁴ The Grow More Food Enquiry Committee (1952), after a careful review of efforts towards improvement

⁴ Report of the Fiscal Commission, 1949-50, Vol. I, pp. 90-91.

of the rural life of the villagers, came to the conclusion that agricultural improvement is an integral part of the wider problem of raising the level of rural life. The economic aspects of village life cannot be detached from the broader social aspects; and agricultural improvement is inextricably linked up with a whole set of social problems. The Committee, therefore, recommended a scheme of development of village life covering all aspects and the organisation of a National Extension Movement covering the entire country within a period of 7 or 8 years.⁵ This scheme was incorporated in the First Five-Year Plan of the nation, which stressed community development as a distinctive approach to these problems. For the first time, a centralised and co-ordinated policy was formulated in the Community Development Project and National Extension Service.

Basic Principles

The movement lays stress on the following basic principles: (i) In areas of intensive effort, developmental agencies of the Government should work together as a team in programmes which are planned and co-ordinated in advance. The activities comprised within the community development and national extension programme should be regarded as an integral part of a programme for improving all aspects of rural life. (ii) There has to be a co-ordinated approach to the villager, comprehending his whole life, through a common agent, *viz.*, the village level worker. (iii) While the official machinery would guide and assist, the motive force for improvement should come from the people themselves, the State assisting also with supplies, services and credit. (iv) The vast unutilised energy in the countryside should be harnessed for constructive work, every family devoting its time not only to its own programmes but also to programmes for the benefit of the community. (v) Programmes should be pursued intensively to gain the best results. Practically every agriculturist family should make its own contribution through a village organisation. (vi) The approach to the villager should be in terms of his own experience and problems, conceived on the pattern of simplicity, avoiding elaborate techniques and equipment, until he is ready for them. (vii) There should be a dominant purpose round which the enthus-

⁵ Report, Conclusions and Recommendations, pp. 6 to 28 and 68-71.

iasm of the people could be aroused and sustained. The aim should be to create in the rural population a burning desire for a higher standard of living—the will to live better. (viii) The co-operative principle should be applied in its infinitely varying forms for solving all problems of rural life.⁶

In brief, the movement seeks to bring about a change of outlook in the following three directions: (i) increased employment and increased production by the application of scientific methods of agriculture, animal husbandry, etc., and the establishment of subsidiary and cottage industries; (ii) self-help and self-reliance and the largest possible extension of the principle of co-operation; and (iii) the need for community effort for building up community assets such as roads, tanks, schools, health centres, etc.⁷

COMMUNITY PROJECTS PROGRAMME

The programme was inaugurated on October 2, 1952 in 55 projects comprising 27,388 villages having a population of 16·7 million. Each Project Area was divided into 3 Development Blocks, a block consisting of about 100 villages and a population of about 60,000 to 70,000 spread over an area of 150-170 sq. miles. Each development block was to have a minimum administrative set-up consisting of the block development officer, extension officers for agriculture, animal husbandry and co-operation, two social education organisers, an overseer with public health bias, 10 village level workers and some ancillary staff. In the selection of initial projects, agricultural production was the most urgent objective. Therefore, one of the criteria for the selection of the Project Area or independent Development Block Area was the existence of irrigation facilities or assured rainfall to attain this objective.⁸ The main lines of activity in a project are briefly divided into agriculture and related activities; irrigation; communications; education; health; supplementary employment; housing; training and social welfare.

The administrative structure consisted of the Central Committee (the Planning Commission) with a separate Administrator

6 Report on the First Five-Year Plan, 1952, pp. 223-24; and V. T. Krishnamachari : Community Development in India, 1958, p. 15.

7 Community Development in India, pp. 18-19.

8 But see also P. E. O. First Evaluation Report on the working of community projects, p. 1: "On the other hand, in most States some areas were selected for exactly the opposite reason, namely, their general economic backwardness.

of the Community Projects, the Development Committee at the State level with a Commissioner or a similar official as Secretary, Development Officers at the district and project levels, an Executive Officer with 125 Supervisors and village level workers. To achieve co-ordination at the District, Sub-Divisional and Block levels, functions similar to those of the Development Commissioner have been entrusted to the Collector, Sub-Divisional Officer and the Block Development Officer, respectively. The technical staffs belonging to the different development departments are supervised by the general administrative officer at the appropriate level. These arrangements aim at the transformation of the existing general administrative cadres of Government into welfare cadres. The cardinal principle of the programme is to ensure people's participation right from the start, not merely in the implementation of the community development project but also in its planning. To enlist people's participation, the *Bharat Sevak Samaj* has been organised as a non-official counterpart of the scheme of Community Development, and as an agency for mobilisation of voluntary effort on the part of the villagers, either in the form of labour or cash.

The cost of a basic type of rural community project was estimated at Rs. 65 lakhs for a period of three years. In order to enable expansion of the programme in future, the Central Committee decided that the cost should not exceed Rs. 45 lakhs per project. The cost is shared between the Centre and the States in the proportion of 75 : 25 in respect of non-recurring expenditure and 50 : 50 in respect of recurring expenditure. After a period of three years, the Community Project areas are intended to become Development Blocks and the State Governments are expected to bear all the expenses of the development blocks after the third year. In the case of a national extension service block, the schematic budget was based on the outlay of Rs. 4.5 lakhs in three years, in addition to Rs. 3 lakhs as short-term loans. The First Plan provided Rs. 90 crores for this programme, in addition to about Rs. 10 crores provided in the State Plans for rural development. In addition, the American Technical Co-operative Administration has contributed Rs. 50 million with matching grants from the Government of India for supporting projects such as the acquisition and distribution of fertilisers, iron and steel, projects for ground water irrigation, distribution of soil fertility and fertiliser use, malaria control and for

training of village level workers and project supervisors. The Ford Foundation also provided a total sum of Rs. 2.3 crores for the setting up of 15 pilot community development projects and 25 extension training centres in the country.

NATIONAL EXTENSION SERVICE

There have been four stages in the spread of the National Extension Service as originally conceived. They are: (i) the pre-extension stage. During this stage, local development programmes including those of local boards are organised to prepare the people for the N. E. S. These programmes are prepared in consultation with the people, who make a contribution in the form of labour and/or money. This is the stage of preparation. (ii) The second stage is when the N. E. S. is introduced in an area which is assisted by the Central Government on a permanent basis. (iii) The blocks in which successful results have been achieved with the maximum popular co-operation are selected for intensive development for a period of three years. (iv) After this, the areas revert to the permanent N. E. S. stage. A programme was drawn up for 1,200 blocks, 300 under the Community Project Scheme and 900 under the N. E. S., covering 120,000 villages and 75 million people or nearly one-fourth of the population within the operation of the extension service.

The continuity of the N. E. S. movement is ensured through carefully organised programmes of development which give substance to the community approach. Broadly, these are classified into (1) permanent or long-term programmes for the village as a whole and (2) annual programmes for every family for increased production and employment. Under the first, importance is attached to the integration of the N. E. S. with other agencies connected with land reforms, consolidation of holdings, improvement of irrigation facilities, contour bunding and adoption of scientific methods of cultivation. Under the second category of programmes, every family, it is envisaged, will have an annual plan for adoption of scientific agriculture and the evolution of a diversified economy. Increased employment and increased production are to provide the motivation for every family, and co-operative activity of all types is encouraged.

Progress in Coverage

Table I gives the distribution of development blocks and the coverage in population and number of villages represented by them during the First Plan.

TABLE I
PROGRESS OF COMMUNITY DEVELOPMENT PROGRAMME

	No. of Blocks allotted	No. of Blocks where work has started	No. of villages covered	Population covered (millions)
	1	2	3	4
1. Community Project Blocks 1952-53	167*	167	27,388	16.7
2. Community Development Blocks 1953-54	53	53	8,682	4.4
3. Community Development Blocks 1955-56 (on conversion)	152	152	20,817	12.1
4. N. E. S. Blocks 1953-54	112**	112	15,336	8.4
5. N. E. S. Blocks 1954-55	245	245	34,704	17.4
6. N. E. S. Blocks 1955-56	259	259	33,220	18.5
(Plus)	172@	..	17,200	11.3
Total ..	1,160	988	1,57,347	88.8

Source: Review of the First Five-Year Plan, 1957, p. 110.

* In terms of area and population covered, this number was considered to be equivalent of 247 blocks.

** 88 Blocks of the 1953-54 series and 98 blocks of the 1954-55 series were converted into intensive Community Development Blocks.

@ Although allotted in January 1956, programme of work was scheduled to be taken up on April 1, 1956.

The programme was initiated in October, 1952. By the end of 1955-56, 988 Development Blocks covering 1,40,000 villages and a population of 77.5 million were taken up. As part of the programme approved for the First Plan, 172 additional blocks comprising 17,200 villages and a population of 11.3 million were taken up in April, 1956. Thus one out of every three villages in India was covered by the programme. Nearly 400 development blocks have passed

into a relatively more intensive phase of development. Under the revised pattern, every new Development Block is first taken up under the N. E. S. Scheme.

Under the Second Five-Year Plan, 3,800 additional development blocks would be covered by the N.E.S. Of these, 1,120 would be converted into Community Development Blocks. A provision of Rs. 200 crores has been made for implementing this scheme. The outlay in an N.E.S. Block may be Rs. 4 lakhs and in a Community Development Block Rs. 12 lakhs. Of the total sum of Rs. 200 crores, the Central Government has allocated Rs. 12 crores for schemes undertaken or directly sponsored by the Community Projects Administration. In 1956-57, 495 blocks and in 1957-58, 597 blocks were brought under the N.E.S.; and 440 N.E.S. blocks were converted into community development blocks. In 1957-58, these community development programmes covered 276,000 villages with a population of 150 million,⁹ thus serving one out of every two villages.

Achievement and Results

By the end of the First Plan period, the outlay on the Community Projects and N.E.S. was Rs. 57 crores. The actual outlay to the planned provision for the latter was 63·3 per cent. In terms of physical achievement, in the sphere of improvement of agriculture, 1,76,666 tons of improved seed and 335,285 tons of chemical fertilizers were supplied; 1,57,000 acres of land were planted with fruit trees; 3,88,000 acres of land were brought under vegetable cultivation and 1·1 million acres previously under cultivation were developed. The additional area brought under irrigation mainly from minor works was about 2 million acres. Under the animal husbandry programme, 2,563 key village centres were established and 12,824 pedigree animals were supplied. From 1953-54 to 1955-56, the number of agricultural co-operatives increased from 1,01,628 to 1,59,939, membership increasing from 5·1 to 7·8 million. In the sphere of communications, the construction of 6,029 miles of metalled and 38,000 miles of unmetalled roads are indicative of the prospects for the future. Out of 1,16,000 local development works approved, 44,000 were completed. Under

⁹ Appraisal and Prospects of the Second Five-Year Plan, 1958, p. 45.

health and rural sanitation, the construction of 42,000 drinking water wells and renovation of 65,000 wells and 1,10,000 rural latrines are significant of the possibilities under a programme of people's participation. In the sphere of education, 15,000 new schools were constructed; 6,968 primary schools were converted into basic schools; 41,000 adult education centres which imparted literacy to about a million adults were established.¹⁰

Though no up-to-date data are available on the proportion of cultivating families taking to different agricultural development programmes, a comparison of the Acceptance of Practices Enquiry (APE) made in September, 1954 with a similar Enquiry (Acceptance of Practices Enquiry Repeat—APR) carried out three years later in Sept.-Oct., 1957 shows the extent to which the adoption of agricultural programmes had progressed.¹¹ The following Table shows the results of these enquiries.¹²

TABLE II
PROPORTION OF HOUSEHOLDS, IN SAMPLE VILLAGES, ADOPTING
THE DIFFERENT PROGRAMMES

Items					A.P.R. (1957) Per cent	A.P.E. (1954) Per cent	Per cent growth (A.P.E. (1954) =100)
Seeds	..	..	..	..	67·1	48·0	139·8
Fertilizers	..	..	..	..	65·3	42·4	154·0
Methods	..	..	..	..	57·4	29·3	195·9
Seeds & Fertilizers	..	..	..	..	49·7	30·6	162·4
Seeds and Method of Cultivation	..	..	..	..	44·3	22·4	197·8
Fertilizers and Methods	..	..	..	..	43·1	18·5	233·0
Seeds, Fertilizers and Methods	..	..	..	..	34·6	15·8	219·0

It will be seen that by Sept.-Oct., 1957, when the Repeat Enquiry was conducted, nearly two-thirds of the households had adopted

10 Review of the First Five-Year Plan, 1957, pp. 114-117.

11 P. E. O.: The Fifth Evaluation Report on Working of Community Development and N. E. S. Blocks, Planning Commission, May 1958, Chapter III, pp. 62-98.

12 *Ibid.*, p. 89.

improved seeds and an equal number had taken to fertilizers. It was also found that the proportion of households which had adopted ammonium sulphate was 45 per cent. Although as much as 57 per cent of the households adopted improved methods, only 15 per cent took to the Japanese method of paddy cultivation. This was partly because this method involves more labour and households having large holdings were faced with the problem of labour shortage. While the spread of individual practices is considerable, the adoption of two or three practices together is less widespread. Only 35 per cent of the households have taken to all the three—improved seeds, fertilizers, and improved methods.

It will also be noticed that while the proportion of households adopting a combination of methods is the lowest, the growth in the adoption of a combination of methods between 1954 and 1957 has been higher (e.g., an increase of 133 per cent in the case of fertilizers and improved methods) than that of individual agricultural practices. Similarly, the percentage of households adopting the Japanese method increased by more than five times between 1954 and 1957.¹³

The figures of achievement under different heads of development in N.E.S. and C.P. areas are sometimes difficult to reconcile or interpret in relation to the overall progress in the country. In the operation of the programme, there has been too much emphasis on financial accomplishments—getting targets achieved, expenditure incurred, buildings constructed, etc. Not enough stress is laid on the education of the people into new ways of doing things and on making the N.E.S. an effective agency for the implementation of the development programmes.¹⁴ The rate of progress achieved, both in the physical and psychological sense has not been uniform in different areas. The effects of the programme, especially of the provision of amenities have been very uneven in different villages. Disparities in development as between villages have also increased to some extent. But the range of activities undertaken is more impressive than the achievements. A review of the programme through an intensive and qualitative study of socio-economic

13 P. E. O.: The Fifth Evaluation Report, *Op. cit.*, p. 86.

14 P. E. O.: (Third) Evaluation Report on Working of Community Projects and N. E. S. Blocks, April, 1956, p. 12.

change in about 15 to 20 per cent of the villages in the project areas¹⁵ stressed that "advance on the rural front cannot be made merely by the institution of an extension agency; it needs to be supplemented by adequate support on the side of skills, supplies and credit." Therefore, there should be some review of the contents both of the N.E.S. and post-intensive blocks, especially the latter in the direction of making more provision for works programmes and some provision for loan finance. More important is the need for integrating project expenditure with non-project expenditure on rural development. The N.E.S. should eventually become a permanent and normal field development agency of State Governments in the rural areas rather than as some special and temporary agency. The supply of technical skills of sufficient competence in planning and implementation of the programmes and the provision of research facilities in the field and closer links with field experience are emphasised.

In regard to the phasing of the expansion programme greater attention to pre-planning and longer periods of training are observed to be essential. There has been a general lack of enthusiasm among the villagers towards adult literacy and this indifference is a matter for investigation. Similarly, the programmes of community centres and activities of clubs which are not working satisfactorily, require to be reviewed. While it has been possible to create material conditions that are favourable for the expansion of the co-operative movement in the project areas, the impact of the C. D. and N.E.S. programme on the co-operative movement has been quite uneven. It is also a matter of concern that multi-purpose co-operative societies are multi-purpose only in name and in a majority of cases, they function as credit societies as elsewhere. The system of integrated finance has been working with considerable success in some project areas and the possibilities of its extension to other project areas and to all chief crops should be studied. Difficulties have been experienced in the working of 26 pilot projects on cottage and small-scale industries and there is, therefore, need for a great deal of fundamental thinking from the point of view of the long range success of the new programmes for cottage and small-scale industries. The problems are not merely the introduction of new techno-

¹⁵ P. E. O.: Fourth Evaluation Report on Working of Community Projects and N.E.S. Blocks, April, 1957, p. 30.

logy, timely supplies and adequate credit to individual artisans but also those of marketing and of group organisation.

PEOPLE'S PARTICIPATION

An essential feature of the movement has been the participation of the people in the planning and implementation of rural development schemes. There has been great variation in the extent of participation by the communities in this programme. For instance, while people's participation in any work of common benefit was negligible in the Chalakudy project area in Kerala, at the other extreme, in the Batala project in the Punjab, where contributions of voluntary labour were given by every family, there was a sense of participation in programmes of benefit to the community. The value of contribution made by the people in national extension and community project areas amounted to Rs. 28.13 crores or about 56 per cent of the expenditure incurred by the Government from October, 1952 to 1955-56 and was, on an average, about Rs. 3.48 per person per annum.¹⁶ The value of contribution increased to Rs. 57.65 crores at the end of March, 1958, that is, 58 per cent of the total government expenditure.¹⁷ It has been estimated that there are about 50,000 adult male workers in a project area, who, on the average, are idle for six months in a year. If even a fourth of this idle time could be harnessed for voluntary effort or self-help programmes at a wage rate of Rs. 1.50 for an eight-hour day, it would mean that the villagers' contribution in labour alone would amount to Rs. 24 lakhs per annum. The contributions of the villagers to the different activities of the community development programme are estimated at (i) 10 per cent of the cost of irrigation, (ii) 25 per cent of the cost of drainage and drinking water supply and buildings for schools and dispensaries, (iii) 50 per cent of the capital cost of community centres and (iv) the entire cost of ordinary roads.¹⁸ People's participation worked out to an average of Rs. 1.82 per person in community development and Rs. 1.04 in N.E.S. blocks. The value of people's participation was on an average about 80 per cent higher in community development than in the N.E.S. blocks.¹⁹ The larger budget of the C.D.

¹⁶ Review of the First Five-Year Plan, 1957, p. 116.

¹⁷ *Kurukshetra*, Sixth Anniversary Number, Vol. 7, No. 1, October 2, 1958, p. 122.

¹⁸ Community Projects Administration: India: Community Projects, A Draft Handbook, New Delhi, 1952, pp. 135-136.

¹⁹ The Fifth Evaluation Report on Working of Community Development and N. E. S. Blocks, p. 21.

block obviously afforded much greater scope for obtaining people's participation for community works and other activities. While rural households have participated in large numbers in the construction of village roads, school buildings and drinking water wells, they showed little interest in the organisations for recreation and social relations.

It has been found that people's participation has been higher in the case of roads. School buildings come next. The following table shows the distribution of blocks by percentage of participating households in sample villages.²⁰

TABLE III

Item	Number of blocks wherein participation ranged between						Total Number of Sample Blocks
	50 to 100 %	25 to 50 %	10 to 25 %	Below 10 %	Nil %	Not sponsored	
Roads	2	2	2	3	1	4	14
School Buildings ..	Nil	1	4	3	1	5	14
Drinking water wells	Nil	Nil	2	2	1	9	14

It is noteworthy that in the case of roads people's participation ranged as high as 50 per cent to 100 per cent in the case of two blocks and as much as between 10 to 50 per cent in the case of four blocks. It was also noticed that popular participation declined towards the closing phases of both GD and NES blocks. This meant that the benefits from the educational effort and radiational effect of the work done in the earlier years were not being obtained. The reasons for decline in popular participation should be carefully investigated.

Use has also been made of local organisations like panchayats and co-operatives for enlisting the participation of the people in the rural areas. On the basis of a study made by the Programme Evaluation Organisation,²¹ it was observed that about 60 per cent of the panchayats in 290 selected villages made some contribution to development activity. In 138 villages, the contribution was in

²⁰ *Ibid.*, pp. 92-93.

²¹ *Ibid.*, pp. 32-33.

cash and in about the same number, it was in labour. The proportion of villages in which panchayats made contributions to development activities was particularly high in the Punjab, U.P., Bombay, Madhya Pradesh, Madras and Bihar. Contributions were the highest in the Punjab which averaged Rs. 5,000 in terms of cash and more than Rs. 1,000 in terms of labour. Cash contributions were also substantial in Madras (Rs. 2,300), Bombay (over Rs. 1,000) and U.P., Kerala and Madhya Pradesh (over Rs. 600 each).²² As regards mobilisation of people's participation through the co-operatives, only 32 per cent of the families participated in co-operative societies and nearly two-thirds of all families remained outside the movement.²³

In areas where development activities are entrusted to *ad hoc* non-elective bodies such as *Gram Vikas Mandals* and others, the proportion of inactive or moribund institutions has been high, except in the case of community centres, and only small percentages of the households participate in them. With a view to mobilising people's participation, it is necessary to put greater emphasis on the building of strong basic institutions with the provision of adequate resources and continuous guidance, opportunity and experience. In general, the possibilities which the resources available under the community projects offered for the mobilisation of village communities and creating in them a sense of self-help and collective action, were nowhere adequately utilised. Excessive dependence on continued Government initiative and assistance has been shown by a vast section of rural population in community development areas.

Despite these drawbacks, on the whole, the results achieved in this sphere are promising. People's participation in development activities organised by the village institutions and *ad hoc* voluntary agencies has helped to create leadership in the village. The traditional leaders have helped in mobilising the requisite effort. Emergence of new leadership, especially of young leaders has been noticed in a number of villages. The young men have been particularly active in assuming institutional leadership position, *e.g.*, in panchayats. The initial scepticism and apathy among the people towards

²² *Ibid.*, p. 33.

²³ *Ibid.*, p. 97.

official effort are giving way to confidence in the Government's interest in their betterment, and especially in their own capacity to organize themselves for collective effort and to achieve the improvement desired.

TRAINING IN EXTENSION METHODS

To implement a programme of this magnitude, great importance is attached to the training of extension workers. The aims of extension work are to bring knowledge to people or to spread information to those who need it; to bring about improvement in agricultural practices as also in community living as a result of this knowledge; to study local conditions and to adapt solutions to local requirements; in a word, to introduce better methods by changing the attitude of the people and to win the participation of the people in the processes of social progress.²⁴ The extension workers "have to understand rural problems, the psychology of the farmer, and offer solutions to his various difficulties. They have to try and find out the felt needs of the people, and the efficacy of their solutions must be demonstrated (in practice). They should be able to discover leadership and stimulate it to action. Their duties have thus to be educative and demonstrational".²⁵ The programme is estimated to require about 2,00,000 workers in addition to those already serving. It has been estimated that in the Second Plan period, technical personnel numbering 96,500 would be required in various categories such as project executive officers, block level extension officers, sanitary inspectors, lady health visitors, midwives, overseers, etc. The multi-purpose village level workers are given training in basic agriculture for at least one year after matriculation. They receive further training in extension methods at the extension training centres for a period of six months in the various problems of rural life including agriculture, co-operation, animal husbandry, rural health, sanitation, social education, and cottage industries. Training courses have been arranged for extension and orientation training for the various specialists and administrative officers.

Great stress is laid on the training of staff. A study on the working of Community Centres undertaken by the Programme

²⁴ See A. F. Laidlaw: *Extension Work in the Co-operative Movement*, Central Committee for Co-operative Training, Reserve Bank of India, 1958, pp. 3-4.

²⁵ Report on the First Five-Year Plan, p. 232.

Evaluation Organisation in 1957 in 20 selected blocks from the States of Assam, Bihar, Bombay, Kerala, Madras and Uttar Pradesh indicated that 25 per cent of the Block Development Officers, 32 per cent of agricultural officers, 22 per cent of the social education officers were untrained. In each of the above categories, the proportions of untrained officers were consistently higher in the N.E.S. blocks than in the community development blocks. In the post-intensive blocks, the percentage of untrained officers was—surprisingly—higher, being 75 and 50 in the case of Block Development Officers and Agricultural Officers respectively. As regards the Gram Sevaks, only a third were trained in basic agriculture, half of them in extension training and one-sixth in the other types of training.²⁶ This is partly due to the paucity of trained personnel generally and in part, probably, due to the idea that the blocks in the intensive stage of development should be given priority over the post-intensive blocks in their claims for trained officers. However, the situation is a matter of concern in the post-intensive phase blocks and is not very reassuring.

Large scale training programmes have been organised for several categories of personnel. The number of extension training centres for the training of village level workers has increased from 34 in 1952 to 43 in 1955-56. They had trained 14,087 village level workers by the end of the First Plan.* Seventeen extension training centres were selected for orientation training for group level workers. Basic training in agriculture was imparted in 33 new basic agricultural schools and 13 agricultural wings; and 22 home science centres were organised for the training of *Gram Sevikas*. Training of block development officers was organised in three centres which trained 885 block officers. The number of social education organisers trained was 1,327. Special training was given to 28 social education officers for tribal areas in 1955-56. Training arrangements for auxiliary midwives, and lady health visitors were made at 53 different centres. Training of multi-purpose overseers was imparted in 25 different institutions.²⁷

In the Second Plan period, training facilities have been considerably expanded. Table IV shows the number of training centres and the number trained as on August, 1959.

26 Committee on Plan Projects: Report of the Team for the Study of Community Projects and N. E. S., Vol. II, 1957, p. 40.

27 Review of the First Five-Year Plan, pp. 116-117.

TABLE IV
 AVAILABILITY OF TECHNICAL PERSONNEL
 (August, 1959)

Category	Number of training centres	Number trained
1. Village Level Workers (Integrated course)*	84	35,134
2. <i>Gram Sevikas</i> **	27	1,266
3. <i>Mukhya Sevikas</i>	10	1,447
4. Social Education Organisers (Men)	7	2,848
5. S. E. O. (Tribal)	1	300
6. Extension Officers (Programme for Women and Children) (Women)	10	1,285
7. Block Development Officers	7	2,690
8. Health Personnel*	3	1,889
9. Co-operation (Block Level Extension Officers)@	8	2,092
10. Extension Officers (Industries)	11	1,367

* as on March, 1959. ** as on June, 1959. @ as on July, 1959.
 Source: *Kurukshetra*, Vol. 8, No. 1, October 2, 1959, pp. 78-79.

With a view to providing higher training to the key personnel, administrative as well as technical, of the Central and State Governments in group methods and the sociological aspects of the programme, a Central Institute of Community Development was set up at Mussoorie in June, 1958. A Research Wing has also been attached to the Central Institute. The organisation of inter-State Seminars, in-service training and study tours have also helped to identify practical problems facing extension workers in the country.

Though these efforts have been successful in creating a psychological atmosphere conducive to rural development, more attention needs to be paid to the whole problem of training and orientation of the block and specialist staff. Among the major defects noticed in the training programme are: there has been less than sufficient

understanding of the objectives and techniques of community development programmes among the specialist staff. In some of the training institutions for village level workers, it has been noticed that integration is assumed to be complete by merely grafting extension on basic agriculture. This is not sufficient and integration must start from the beginning of the course with an integrated syllabus and teaching. The type of training given to the *Gram Sevak* has not enabled him to make any special mark in the field of agriculture. Training for a duration of 18 months has not been sufficient. The period of training should be extended to 2 years. Follow-up work of the trainees in the field has continued to be one of the weakest links in the training programme. In the method of job training, the emphasis has been more on theory than on practice. As regards the training of personnel at higher levels, the emphasis should be on quick and effective orientation in regard to the various problems of community development and in particular, to co-ordinated administration.

The success of the programmes as a whole depends on the efficient organisation of training facilities and in the expansion of the programme it should be a guiding consideration to undertake training of personnel in advance of the programme. In addition, the rate of expansion should be determined by the numbers of trained personnel available. Everyone participating in the programme should feel free to receive and interpret new experience, re-examine past practice and assumptions as also seek out new ways of achieving the basic aims. In particular, it is essential to maintain close contacts between the research personnel. In the selection of trainees, aptitude should be an important consideration. The content of training should be broad-based as to provide knowledge of the elements of agriculture, animal husbandry, health and sanitation, nutrition, community organisation and knowledge of human behaviour and relations. Above all, it is necessary to lay stress on practical aspects of training.²⁸ An extension worker should begin with a period of apprenticeship in the field under an experienced worker, not with a long theoretical course in the class-

28 Report of the Mission on Community Organisation and Development in South and South-East Asia, United Nations, 1953, pp. 70-71.

room. It is far better for the new recruit to get his first taste of co-operation from practical work in the field than from a text-book.²⁹

REORIENTATION OF COMMUNITY DEVELOPMENT

With a view to examining critically the working of the programme and its relationship with the wider aspects of development and administration, a Study Team led by Shri Balwantray Mehta was appointed by the Committee on Plan Projects in 1957. The report of the Team contained detailed recommendations on the re-phasing of community development with particular reference to the pattern, finance and pace of expansion of the development programme.³⁰ The Team felt that the present system of dividing the C. D. programme into three phases was artificial and created confusion. The resources in the N.E.S. stage were inadequate to meet the needs of development work and the blocks which completed the post-intensive period of operation generally stagnated. The Team, therefore, recommended the abolition of the distinction between the N.E.S., Intensive Development and Post-Intensive Development and its substitution by Stage I blocks with a life of six years, to be followed by a Stage II period (post-intensive) of six years. The unspent funds of each year should be carried forward to the next year within certain limits. The Team also recommended that the original budget ceiling of Rs. 15 lakhs should be restored and in the second phase, the budget ceiling should be Rs. 5.5 lakhs. In view of limited financial resources, shortage of technical personnel and of supervisory staff, the decision to cover the whole country with development blocks by 1961 should be revised and the date extended by at least three years.

These recommendations of the Study Team have been accepted by the Government of India with some modifications. In regard to the pattern of the programme, it has been decided to have only two stages. Stage I is the intensive development phase wherein people's participation would be promoted and the Panchayats would be intimately associated with the formulation of plans for the respective areas. The growth and functioning of self-reliant

²⁹ See A. F. Laidlaw: *Extension Work in the Co-operative Movement*, *Op. cit.*, p. 22.

³⁰ Report of the Team for the Study of Community Projects and National Extension Service, Vol. I, Committee on Plan Projects, 1957, pp. 24-28.

rural communities would depend upon the degree of success attained in the first stage. In the second stage which is the post-intensive phase, the operation of the method of Community Development would be intensified in its fuller amplitude; the emphasis is more on community development than on development programmes. But each stage would be of five years' duration, in order to maintain the urgency and dynamism of the programme. The period of operation of Stage I would, however, be extended by one year in specific cases in case of necessity.

As regards financial allotment, having regard to past experience of the rate of expenditure, it has been decided that the schematic budget for a block should be Rs. 12 lakhs for Stage I and Rs. 5 lakhs for Stage II. Under the revised programme pattern, the programme in the post-intensive development blocks would, from the beginning, be entrusted to statutory bodies at the block or district level. In order to maintain the tempo of progress as also to achieve progressively increased development in the areas, at the post-intensive stage, development departments would be required to make increased block-wise allotment of funds in their charge. In regard to the rephrasing of the expansion programme, the National Development Council decided that the programme should be staggered so as to cover the entire country by October, 1963. The Council also agreed to the introduction of a pre-extension stage for the programme with the intention of concerted effort on agriculture for one year.

It has been decided that the revised pattern of community development programme should come into operation from April, 1959. It would thus undergo a shift in emphasis so as to develop local leadership capable of assuming greater responsibility for development. In the formulation of the programme and the budget estimates for each block, the objectives are: (i) In every block, from the very beginning, the block and village organisations would be basic units for formulating and carrying out different programmes; (ii) the Village Panchayat, the Village Co-operative and the Village School as also a statutory body at the block or district level are the foundations for the block development programmes. Full responsibility for planning and implementing the programme should be transferred to them. These institutions should be estab-

lished in the course of two or three years and should begin to function well before the end of the first stage; (iii) the programmes and activities of agencies included in the schematic budget as well as of departmental agencies which may not form part of the schematic budget, should be fully integrated into the block development plan; (iv) as far as possible, those provisions should be included in the schematic budget which are intended to attract local community participation in labour, money and other ways.³¹

Under the rephased programme, all development blocks in the country have been re-designated. Out of 2,552 development blocks in 1959-60, 1,660½ were Stage I blocks, 636½ Stage II blocks and the rest were community development and multi-purpose blocks. They covered 3,39,734 villages with a population of 172·94 million. In addition, there are 545 pre-extension blocks, of which 145 would become Stage I blocks from October, 1959 and 202 from April, 1960.³² It is hoped that through the effective operation of the programmes under these two stages as well as through other complementary schemes, the level of rural life would be substantially raised by the efficient use of land resources, the application of modern scientific research and the evolution of a diversified economy. In the ultimate analysis, the degree of success of the development efforts in planning and implementation of the programme, largely depends upon the measure of co-ordination achieved between the N.E.S. agency and the development departments of the Government and the statutory bodies like panchayats as also voluntary welfare agencies.

CO-ORDINATION OF DEVELOPMENTAL ADMINISTRATION

The problem of co-ordination of developmental administration at the district, block and village levels has assumed great significance with the acceptance of the Welfare State as the objective. Rural developmental administration as well as its machinery have grown more complex. All developmental programmes necessitate co-operation among the departments of the administration. This is especially true of community development programmes. There are two problems at each administrative level. Firstly, the work

31 V. T. Krishnamachari: *Community Development in India*, *Op cit.*, Appendix III, p. 153-154.

32 *Kurukshetra*, Vol. 8, No. 1, October 2, 1959, p. 77.

of different technical departments has to be knit together so as to make a single, co-ordinated programme. Secondly, there is the problem of guidance and supervision. At the State level, co-ordination of programmes is undertaken by the Development Commissioner under the direction of a Cabinet Committee on development. In the district or the sub-division, these responsibilities devolve on the Collector and Sub-Divisional Officer. The basic pattern of the programme has a block team of specialists working under the general direction and administrative control of the Block Development Officer, but receiving technical guidance of the respective district technical officers. This pattern is related on the one hand to the concept of integrated development of the block area and on the other to that of the multi-purpose extension workers.

Some unhealthy trends are noticed in the practical working of the programme. It has been observed that the dual control of specialists concerned with different subjects at the block level by the Block Development Officer and by technical officers at the district level has not been working satisfactorily.³³ The block level staff no longer have the advantage of technical staff at the district level exclusively attached to their programme. The leadership of the Collector is undoubted and the technical officers are prepared to work under him. In fact, co-ordination at the block level has become a by-product of co-ordination at the district level with the District Collector exercising more co-ordination over the technical heads of development departments and control over the development work of the project staff. There is a distinct feeling among the technical officers that the introduction of Block Development Officers is removing them from their contact with the ground staff and that the technical departments are not consulted in the working of the projects. It has also happened that the departmental officers have concentrated their attention in non-block areas where they had more direct control on their specialist staff. While integration of revenue and development functions at the block level has continued to expand, measures have not been taken to reorient the block staff in relation to their new responsibilities and extension functions.

33 The (Third) Evaluation Report on the Working of Community Projects and N. E. S. Blocks, pp. 20-22.

Crucial importance is attached to the problem of inter-departmental co-ordination at the block level but there is no easy or quick solution to this problem. Its magnitude will increase as the N.E.S. pattern spreads all over the country. It is essential to associate technical officers in the district fully with all phases of the programme. Responsibility should be entrusted to them for the efficient discharge of their functions. Moreover, in all technical matters, the opinion of the departmental specialist should be final. The block level staff should receive guidance from them at all stages of their work. Much of the work of the district level technical officers is of an administrative nature. They are expected to bring the results of research from research organisations and see that they are properly applied by the field staff. Therefore, any arrangement which removes them from the guidance of their field staff is not only not desirable but harmful from the viewpoint of responsibility and efficiency in work.

N.E.S., Other Official and Non-official Agencies of Development

Another problem is to bring close liaison between the official and the non-official agencies of development. There are also problems of co-ordination in this sphere. Various types of agencies are engaged in the task of rural development. Among these, the Village Panchayat and the village co-operative have been entrusted with various functions in the programme of development. There is also the village school. In the present set-up of administration, these institutions are not inter-linked. They form the basis of all activities in the village and these agencies should be increasingly utilised in the execution of the community development programme in the village. As co-operation develops, the movement will become increasingly representative of the village community, while the panchayat on the other hand, is intended to represent the entire village community and has a larger authority. If, by linking up the village panchayat closely with development programmes, village leadership can be successfully developed, co-operative activity will also be strengthened.³⁴ Besides the usual functions entrusted to them, there are other functions at the village level which the panchayats or the co-operatives can take up according to the local circumstances. There should, however, be the fullest

³⁴ Report on the First Five-Year Plan, p. 133.

co-ordination between them. There is also the problem of co-ordination of activities of local bodies at higher levels. They should be encouraged and assisted in assuming responsibility for a large portion of the administrative and social services within their areas. The ultimate guarantee of the permanence of the movement largely depends on how well these village and intermediate local bodies are established and made into efficient people's organisations for carrying through their own programme of welfare.

Yet another problem is co-ordination of activities of voluntary welfare agencies with the N.E.S. Private voluntary agencies have a major responsibility for organising activities in different fields of social welfare. It is, therefore, necessary to co-ordinate the programmes of various agencies with a view to bringing added strength and intensity of purpose to welfare activities. Such co-ordination requires a common approach and co-operative outlook on the part of organisers of non-official social work. In the implementation of development programmes, better results can be secured by taking the maximum advantage of the civic spirit of non-official workers and agencies.

CONCLUSION—AN ASSESSMENT

The movement has been in existence for nearly seven years and its progress from year to year has been indicated in the annual evaluation reports published by the Planning Commission. A study of these reports brings out several interesting points. Within a year of its inception, the community development programme had given rise to considerable optimism among those who had occasion to watch its progress. For instance, the First Evaluation Report stated: "Old habits of thoughts and action are being discarded with an unexpected ease. It appears that very soon it is going to be more difficult to check the speed of expansion so that it may not outrun the resources of organisation, than to secure full response to such aids to progress as can be put into the field."³⁵ Subsequent evaluation reports, however, tend to take a more cautious attitude and the Fourth Report published in 1957, was critical of the several aspects of the movement.

The greatest failure of the movement has been that it has not aroused sufficient popular enthusiasm and initiative; nor has it

³⁵ Report, p. 46.

been able to achieve much success in the field of development as distinct from welfare. It is true that the pressing need of providing the basic social services cannot be ignored and such advance as the community programmes have been able to make in this direction would have created popular faith in the programme on which future programmes of development can be built. It is nevertheless important to recognise that neither the community projects nor the national extension service have made any sizable impact on agricultural productivity.

While there has been some progress as regards the use of improved seeds, fertilizers, and improved methods, especially the Japanese method of cultivation and minor irrigation, in other aspects of agricultural development like green manuring, conservation of farmyard manure through use of compost pits, land reclamation, soil conservation, consolidation of holdings, etc., there is much less activity. In the propagation of improved techniques, improved seeds and fertilizers, limitations to progress have come more and more from deficiencies in organisation and research than from the unwillingness of the farmer to adopt the improvement suggested. Insufficient supplies, unsatisfactory and inadequate distributive arrangements, high prices and unsuitability of the seed offered to local conditions have retarded progress in the project areas. It must be emphasised that along with the strengthening and expansion of extension agency, the supplies and distribution arrangements should be strengthened.

One of the neglected aspects of the farming programme has been agricultural engineering. There is great need for research into the problems of rural sanitation. The technical assistance to the farmer has been no more than nominal with only one extension officer for about a hundred villages. The shortage of trained personnel having rural affinity and an intimate knowledge of rural conditions has greatly handicapped the successful working of the programme. However, the training facilities provided at various centres would help to relieve this shortage to some extent.

Experience has also shown that the programme has yet to succeed in building up and strengthening local self-governing institutions, or the Village Co-operatives, or other *ad hoc* bodies at

the village or the district level. Though co-operatives are participating in development programmes in several projects, such participation is much less than would be desired.

Besides, the provision of proper facilities for credit has not progressed sufficiently. The availability of co-operative credit has been confined in most areas to the middle and bigger landholders. Even in areas where the co-operative movement is fairly widespread, not more than 30 to 40 per cent of the rural population has been considered creditworthy.³⁶ Thus a large proportion of 'non-creditworthy' people remain untouched by the movement. In some instances the rules have been liberalised with a view to bringing within its fold a larger proportion of cultivators. In many projects, the problem is that the loan funds available from different sources are often administered by different departments. The machinery for recovering the loans has not been strengthened for handling the greatly increased volume of recovery work involved. Lack of adequate co-ordination between the agencies advancing loans and the revenue department which is generally the recovering agency has been another handicap. This has resulted in the accumulation of large arrears in several areas, *e.g.*, Batala in the Punjab and in Bihar. The need is to effect better co-ordination between the advancing agencies and the Revenue Department. To promote agricultural efficiency and increased agricultural production, it is necessary to provide short-term credit facilities to the non-creditworthy on their security of tenure as is being done in Madras and Bombay. Moreover, it would be fruitful to put into practice more effectively the policy of linking loans to creditworthy purposes rather than to creditworthy persons.

In terms of creating increased opportunity for employment in the non-agricultural sector, the programme has only a limited success. New rural industries have benefited no more than 25 out of every 1,000 families in the project areas. Its success has been mainly in the field of providing technical guidance and material resources to the artisans. These are undoubtedly valuable services which need to be rendered to the rural areas. Further, to secure

³⁶ Community Projects Administration: Summary Record of Third Development Commissioners' Conference on Community Projects at Ootacamund (27—31 May, 1954) Planning Commission, Government of India, 1955, p. 111.

more benefit out of the programme for the under-privileged sections of the rural society, the programme should be re-oriented considerably in favour of non-agricultural or rather non-landholding classes, particularly the *Harijans*

The programme for women and children has been one of the weakest links in the development work. There is only one woman social education officer and 2 *Gram Sevikas* to look after the welfare of women and children for every 100 villages. This is far from adequate. The reasons for this state of affairs are acute shortage of suitable women workers, absence of proper training facilities, defective psychological approach and non-availability of funds when required. In the work of women welfare, the area of operation of the trained personnel as well as the scope of the present activities should be limited so as to make the service more intensive and effective. This should be the general policy to be followed when there is not enough trained personnel. A satisfactory programme for child welfare limited to a few lines only should be evolved for a few selected areas in the first instance.

Despite these shortcomings, the community development movement has brought about a significant change in the economic and social life of the countryside. The pace of agricultural extension has continued to grow faster. The working of the movement over half the total number of villages in the country has shown that there is everywhere a desire and determination to achieve better standards.

In the sphere of education, good progress has been achieved in many of the evaluation centres in opening of new schools. The school appears to be the most suitable nucleus around which a vigorous youth programme can be built and the village school teacher is the best local guide for such a programme. A marked improvement is noticed in the tempo of work in social education. The obstacles which impeded progress, especially shortage of personnel and lack of precise ideas about the functions and activities in this field are being progressively overcome. There has been a clear perception of the role of social education in the development programme both on the part of the social education officers and the other project staff and the functions of the former have tended to become better defined.

One of the lessons that emerges from the impact of the programme is that the people have played a part in overcoming several prejudices which are usually associated with village communities. They have not shown lack of enthusiasm for new ideas and programmes or improved methods where rightly approached. If anything, their enthusiasm has more often outstepped the response of the government machinery. People, especially the common people, have shown willingness to participate to the limit of their resources in a socially worthwhile cause. The better-to-do have usually been the contact men of the officials and as a rule have reaped the full benefit of their collaboration. Experience has shown that people's response is more a matter of correct official approach to them than any lack of appreciation of the programme on their part. The achievements recorded under various heads could not have been possible but for the active participation of the people in the programme. In many projects, achievement has been substantial and even if the needs of the people have not been fully met, an appreciable advance has been made towards this end. These achievements are significant as an index of what is practicable on a larger scale.

The promise of material improvement is the most appealing force which can determine action in community development. But material improvement is inter-related with the development of the attitudes and modes of thought within the community. To make rapid advance in this direction, it is necessary to build up work around felt needs and then to harmonise it with 'induced needs'. People should be helped to accept these values and to make them their own through a process of persuasion and education. Basic and lasting improvement can come only from a self-created desire for improvement and not from pressure exerted from outside.

It is necessary to realise that effective lead in the maintenance of programmes and development can come from only village-level leadership. The creative urge of community action, if it is not canalised in the right direction, is apt to end in frustration. This would specially be the case if the neglect of drawing in the smaller man into the extension programme were to continue as at present. Local and regional leaders must be steadily encouraged through their own institutions to continue with the programmes of

maintenance and development. The co-operative movement can provide rural leaders as a link between the rural community and the administration.³⁷ Unless, however, this external action comes from sources which are in full sympathy with the democratic ideology behind the development programme, it would not strengthen the institutional life of the village to an extent sufficient to help in building up a popular and abiding base. It is necessary to realise that decentralization unaccompanied by democratization and co-ordination can be a worse evil than centralisation.³⁸ To this recognition, the Study Team on the working of Community Projects has lent significance.

Although the community development programmes have succeeded in building up new social and extension services, it is, however, equally necessary to maintain these services when the official project comes to a conclusion. During the continuance of the project it may not be necessary to insist that the community should pay for all the social services. But it is desirable that local self-governing institutions and people's representative bodies should be built up and strengthened so as to take over responsibility for running the services and their proper management and maintenance. Their role would be to lead people continuously to a higher standard of life in various directions.

The machinery of the national extension service and the local bodies at higher levels should be adjusted as experience grows. It is also necessary to pay special attention to the development of people's institutions and adequate discharge of their functions. Ultimately, the popular institutions should take complete charge of both planning and implementation of development programmes and the Government should see that these institutions are properly equipped with administrative authority, financial resources and technical personnel. Community development and the national extension service are an integral part of development and the people and the people's institutions will need continuous stimulus till the village leaders are able to assume leadership of the whole movement.

³⁷ Land Reform: Defects in Agrarian Structure as Obstacles to Economic Development, United Nations, 1951, p. 78.

³⁸ See P. E. O.: Evaluation Report on Working of Community Projects during the Six Months, October 1953—March 1954 (1954), pp. 32-34 (mimeo.).

CHAPTER XVII

THE BHOODAN MOVEMENT

We may now briefly review the recent movement for social change, viz., the *Bhoodan* (and *Gramdan*) movement. The *Bhoodan*¹ movement aims at securing, through moral appeal to holders of land, gifts of land, to be utilised for settling the landless or those whose holdings are too small. The movement, initiated by Acharya Vinoba Bhave early in 1951, relies not on legislation, but on voluntary transfers of land made by landowners. The primary aim of the movement is to bring about a change in the attitude of the people towards the ownership of land. The essential concept is that no one has a moral right to land in excess of a certain minimum, when there are large numbers of people who have no land and hence no means of subsistence. Land reform legislation, it is recognised, has its place, but such legislation cannot succeed fully unless there is a new awareness in the countryside of the social obligations attaching to ownership of land and of the limitations arising from these on the right of the individual to own and dispose of land.

According to the 1951 Census, cultivating labourers constituted 44·9 million or 18 per cent of the total agricultural population in the country. The Agricultural Labour Enquiry revealed that about 30·4 per cent of rural families were agricultural labourers, half of them being without land. The premises from which the movement starts are well-founded. The All-India Rural Credit Survey has clearly revealed the existence of land hunger accompanied by the fact of extremely low sizes of holdings of the middle and small farmers. Moreover, the National Sample Survey Report on Land Holdings (No. 10) brings out the extent of land concentration and the degree of disparity in landownership. On an average, nearly 71 per cent of households in rural India operated below 5 acres of land and their share of total land amounted to 17 per cent.

1 Voluntary contributions of land.

The situation is more or less similar in each State. In regard to concentration of land, 4 per cent of households operating more than 25 acres of land, possessed nearly one-third of the total land. A similar feature of concentration is seen in each State.² The All-India Rural Credit Survey pointed out that 30 per cent of the landholders held more than 50 per cent of the land in almost all the 75 districts and in 48 districts, they held more than 60 per cent.³ Thus the problem of agricultural workers and of land concentration has far-reaching implications not only for the rural economy but also in relation to the entire process of economic and social development. Schemes of land distribution may confer only restricted benefits on agricultural workers other than tenants because of the fact that in any scheme of distribution or resettlement, the first claim will be that of tenants already working on lands which may be taken over from the large owners. In view of this difficulty, the Bhoodan movement lays special stress on giving the landless worker an opportunity of owning a productive instrument not otherwise available to him.

Objectives

The Bhoodan movement is not merely a movement for voluntary land transfers; it represents a certain approach to problems of economic and social organisation. The basic philosophy behind *Bhoodan* is that in every village, power should be decentralised; each family should have a right in land and property and there should be no distinction in the matter of wages, etc.⁴ Its concern is to remove the distinction between those who have land and those who are landless within the village and to bring about equality of status and opportunity. The main objective of Bhoodan is to provide each family in rural society with at least a small piece of land to cultivate. This would give every family some means of livelihood and the feeling of a stake in society. It also aims at reconstruction of rural society by encouraging rural industry and attaining comparative self-sufficiency. Thus it attempts to initiate a social revolution with a view to obtaining immediate relief particularly to the landless agricultural classes.

² First Report on Land Holdings, Rural Sector, Number 10, The National Sample Survey, Eighth Round, July, 1954—March, 1955, Delhi, 1958, p. 35.

³ Presidential Address by D. R. Gadgil, Proceedings of the Fifteenth All-India Agricultural Economics Conference, December, 1954, *The Indian Journal of Agricultural Economics*, Vol. X, No. 1, March, 1955, p. 29.

⁴ Acharya Vinoba Bhave: From Bhoodan to Gramdan, Akila Bharat Sarva Seva Sangh, Sarvodaya Pracharalaya, Tanjore, 1957, p. 8.

The collection of voluntary gifts of land and redistribution of land collected are the two important phases of the movement. As Acharya Vinoba Bhave has said, "the chief thing to bear in mind is that the *Bhoodan Yajna* movement does not merely seek to distribute land among the landless but to create a general sense of duty and responsibility or dharma, to liquidate the sense of possession and ownership. This is why we have called our movement *Bhoomidan* and not redistribution of land."⁵ The programme of action of the movement consists in demanding a share equal to one-fifth or one-sixth of land as voluntary gifts from landowners in favour of the landless. The ultimate goal of *Bhoodan* is the establishment of joint ownership of the village in place of individual ownership of land.

Progress

The *Bhoodan Yajna* movement was first initiated at village Pochampalli in Telengana district of Hyderabad, where the first land donation was made in April, 1951. In the beginning, it was decided to collect 2,50,000 acres of land by way of voluntary gifts. There was encouraging response from the big as well as small landholders. Later it was resolved to collect 50 million acres by 1957. The ultimate aim of the movement is that all landless families in India constituting about 10 million or one-fifth of the agricultural population should be enabled to secure at least 5 acres of land each. Table I gives data regarding the progress of Bhoodan movement as on June, 1958.

TABLE I
COLLECTION AND DISTRIBUTION OF LAND: JUNE, 1958

States	Land Collection (acres)	Land Distribution (acres)
Assam	23,196	225
Andhra Pradesh	2,41,950	83,090
Orissa	4,24,635	1,11,785
Uttar Pradesh	5,87,630	77,768
Kerala	29,021	2,126
Tamilnad	70,823	5,349
Delhi	396	157
Punjab-Pepsu	19,929	2,653
Bihar	21,68,857	2,94,448
Bombay	2,28,348	68,493
West Bengal	12,681	3,463
Madhya Pradesh	1,78,816	62,450
Mysore	14,164	1,152
Rajasthan	4,21,118	48,319
Himachal Pradesh	1,568	21
Total	44,23,132	7,61,499

⁵ *Harijan*, 21 May, 1955.

Nearly 4.4 million acres or 8.8 per cent of the target have been collected as land gifts. The number of donors, in 1956, was 5,87,959 and has increased since then. The average amount of land donated per donor, in 1956, was about 7.2 acres. The average donated land per donor was as high as 22 acres in Uttar Pradesh whereas it was as low as 1.5 acres in West Bengal. Further, it may be observed that the States of Bihar, Uttar Pradesh, Orissa and Rajasthan accounted for 81.3 per cent of the total land collected.

In regard to the progress of distribution of Bhoodan lands, out of 4.2 million acres of land collected in 1956, only 0.51 million acres or 12 per cent were distributed to 1,69,594 families. By June, 1958, only 0.76 million acres or 17.2 per cent of the total land collected were distributed to landless families. On an average, about 3 acres were distributed to each landless family in 1956. The average size of distributed land per family was as high as 36.8 acres in Vindhya Pradesh and as low as 1.1 acre in West Bengal. When the land donated is not reallotted, the donor is asked to look after the land and cultivate it himself and credit the net profit after deducting the expenses of cultivation to the Bhoodan agency.

Bhoodan legislation has been passed in most of the States, particularly in Uttar Pradesh, Madhya Pradesh, Orissa, Bihar, Punjab and Madras. We may briefly refer to the procedure of distribution of land gifts. On the appointed day, the Sarvodaya (Bhoodan) workers visit the village and a meeting of all the villagers is held. The Bhoodan workers in consultation with the villagers choose the persons entitled to receive land gifts. In the allotment of lands, preference is given to the *Harijan* families and other backward class families. The selection of recipients is made from among persons having no other alternative means of livelihood and who are in a position to undertake cultivation. The Bhoodan workers are accompanied by revenue officials who complete the work of registration and other legal formalities. No fee is usually charged from the donor or the grantee.⁶ Generally, a family consisting of five persons is given one acre of wet land or 2.5 to 5 acres of dry land. The grantees are not given the right to transfer land by way of sale, mortgage, exchange, gift or otherwise for a period of 10 years from the date of grant. Nor is the

⁶ Bhavé : *Bhoodan Yajna*, p. 25.

land to be liable to attachment in execution of a decree or order passed by a Civil Court.

Limitations

The available data indicate that there has been slow progress in the collection and distribution of Bhoodan lands. The working of the movement is handicapped due to lack of sincere workers and due to defects in the collection work. A pilot enquiry⁷ into the working of Bhoodan Movement in six villages of Gujarat revealed many difficult problems. In three out of six villages there was considerable default in fulfilling the promise of land donations. This was due to the fact that the donors were not anxious to give possession of donated land. There is the problem of resources complementary to land. For example, in some cases, the donees had to refuse to take possession of donated land because they lacked other resources. This underlines the fact that the problem of landless persons is not restricted to lack of land resources only; rather it is the general lack of other resources as well. There were also cases in which land was not accepted by the donees because it was not cultivable.⁸ Though no reliable data are available regarding the type of land donated, it has been estimated that about 70 to 80 per cent of the total land collection are mostly unfertile, and that nearly 50 per cent is of a disputed nature, involving litigation.

A more serious problem is the equitable distribution of Bhoodan lands. Though there is a well-defined process of distribution, its implementation is ineffective. There were also instances where the principle of giving land only to the landless persons and preferably to *Harijans* was not strictly adhered to. In some cases, land was distributed to donees who already owned some land prior to land gift. This can hardly be justified, except for the purpose of raising the farm size nearer to the economic level. But this is not one of the guiding principles in the Bhoodan movement. The pace of distribution also needs to be increased. These facts emphasise the need to give adequate attention to the post-distribution

⁷ The enquiry was conducted by the Agricultural Economics Section of the Department of Economics, University of Bombay, during Oct.-Nov. 1956. The Pilot Project was undertaken mainly with a view to obtain a better understanding of the nature of the problem and to test the questionnaire for wider application. With all their limitations, the results throw some light on the working of the Bhoodan movement. (Report—cyclostyled, 1958).

⁸ Report, pp. 2-3.

work. A sympathetic approach can be established in the field of administrative action by facilitating cultivation of donated land.

It is not the purpose here to enter into the controversial aspects of the movement. There are, however, some aspects of the movement which may lead to undesirable repercussions, creating difficulties in the way of future progress of agrarian reform in the planned economy of India. Firstly, the movement would increase the number of diminutive holdings in the country and in consequence would come into conflict with planned development; and secondly, it ignores the problem of the rational layout and utilisation of the land surface. Both these aspects are important in the scheme of economic planning and to the extent to which the Bhoodan movement conflicts with these objectives it may prove a handicap. Thirdly, although the Bhoodan movement is a logical development of the concept of trusteeship its actual programme would result in investing rights of ownership of land in a vast number of people. Its appeal for gifts is couched in terms of more equal distribution of ownership of land. But the land donors do not seem to subscribe to the doctrine of the social ownership of the means of production. Vinobaji, personally, would emphasise the role of co-operation; but practical considerations have not made it possible to lay emphasis on co-operative or collective ownership and use that would logically follow from their basic philosophy except when they have obtained gifts of the entire lands of a village. The result is that the movement would create a large class of new very small holders and would intensify the sentiment in relation to the ownership of land, its social prestige and its economic value. Considered against a static economy, the Bhoodan approach cannot be dismissed as either irrelevant or ill-directed; but in terms of a rapidly developing economy, the Bhoodan ideology and such success as the movement achieved in practical terms may be a handicap in the proper solution of the land management and production problems at a later stage.⁹

Bhoodan by itself would not solve the land problem. To an extent, it will confer certain benefits in terms of social status and economic opportunity as a result of distribution of lands to the

⁹ See Presidential Address by D. R. Gadgil, Proceedings of the Fifteenth All-India Agricultural Economics Conference, *Op. cit.*, pp. 24-27.

landless. While redistribution of land in favour of the landless has an essential role in the process of social and economic change, its effects in terms of higher living standards and fuller employment are limited.

GRAMDAN¹⁰

Since May, 1957 the emphasis of the movement has shifted to *Gramdan*. In Gramdan, the emphasis is not so much on the negative slogan of abolition of private property but on the positive proposition of community ownership. The Gramdan movement aims at persuading all the resident landholders of a village or a hamlet to give their entire land possessions as a gift. The lands of the village will vest in the village community and private ownership in land would cease. Lands in a Gramdan village would be collectively owned and used. In addition to pooling of the land resources of the village, Gramdan implies the pooling of all the economic resources of the village community, including property other than land as also labour. The main objectives of the movement are: (i) a new feeling of social homogeneity should arise in Gramdan villages; (ii) since Gramdan means the surrender of individual ownership, the donated land should be redistributed on an equal basis; and (iii) a representative body should take root in the villages to solve its problems without the help of external agencies. There are two important considerations underlying Gramdan, viz., (i) the landless benefit by this movement, because landowners by renouncing private ownership identify themselves with all others in the village community; and (ii) the plan of development comes directly from the villagers themselves. This is an important step in the direction of co-operative development of the village economy.

There has been slow progress in the development of the movement. At the end of October, 1958, there were 4,800 gramdans in India. Out of this, Orissa accounted for 1,960, Bombay 920, Kerala 553, Andhra Pradesh 481, Madras 254, Madhya Pradesh 178; Bihar 130, and Assam 127. In all the States, the movement is in the initial stages of experimentation.

The pattern of redistribution of lands in Gramdan villages as followed in Orissa may be indicated. When the donations

¹⁰ Voluntary contributions of entire villages.

have been confirmed under the Bhoodan Act, the lands in Gramdan villages vest in the *Bhoodan Samiti*. The *Samiti* is, however, authorised to distribute the lands even before the donations have been confirmed. In theory, the entire land contributed by cultivators of a Gramdan village forms one pool. In practice, however, the position is rather different. *Per capita* availability of land in a village is worked out. Families holding less than the average availability of land generally retain the entire area and those holding more than the average are asked to indicate which lands they would surrender for purposes of redistribution. Out of the redistributed pool, about 5 per cent of the land is set aside for community purposes. The remaining area is distributed among individuals, the landless getting the first preference. The allotment of land is not restricted to those who are already engaged in cultivation as labourers. The surplus, if any, is given to those who hold less than the average availability. In the selection of allottees, the donors are usually consulted. In some areas, bullocks and implements are distributed along with land. The individual farmer cannot sell or mortgage his holding and the village community has a right to have periodical reconsideration and re-allotment, say, every five or ten years.

Information in regard to the progress of redistribution of Gramdan lands in the country is lacking. However, in the Koraput district of Orissa, which accounted for 1,400 gramdans in April, 1957, land was redistributed in a little less than two-thirds of the villages received in donation. The principles of redistribution were fixed by the villagers themselves with the help and guidance of Bhoodan workers. The principle to distribute land equally to all those who qualified for it, with shares in all types of land, to each family according to the number of its members, was strictly adhered to only in 20 per cent of the villages. The majority decided to give some extra land to the bigger land-owners amounting from one-and-a-half to three times the *per capita* average in the village. In a few villages, they even agreed to give more than this to secure the co-operation of a few recalcitrant big owners.¹¹ This flexibility reveals the keen desire of the leaders of the movement not to force the pace beyond the psychological and mental preparedness of the village people themselves.

¹¹ Manmohan Choudhuri: *The Gramdan Movement*, Third Edition, May, 1957, p. 7.

In regard to the pattern of cultivation of Gramdan lands, no right pattern has yet been evolved. The lands are cultivated in family holdings or in co-operatives. For instance, in the Koraput district of Orissa, lands have been distributed for individual cultivation and only a small proportion, say, about 3 to 5 per cent of land is set apart for collective farming. Though the role of co-operation in agricultural development of Gramdan villages is recognised, it is, however, important to realise that patterns and methods in co-operation must suit the understanding capacity of the participating members.

A review of the working of the Gramdan movement in the Koraput district indicates the difficulties and problems in the task of rural development.¹² The Koraput district is mostly a hilly area inhabited by the *Adivasis* and most of the Gramdan villages are situated on the hill slopes. Although the implications of Gramdan were understood by the large landowners, there were difficulties in the equitable redistribution of land in the Gramdan villages. Efforts at redistribution of land on the basis of *per capita* availability of land in the villages were frequently resisted and compromises had to be made with substantial landowners. There were also considerable disparities in the size of holdings following redistribution of lands. Some cultivators retained three to five times the average availability of land. Further the lands made available for redistribution were mostly poor and fragmented and formed generally not more than 10 per cent of the cultivated area.

The problem of meeting the credit requirements of Gramdan villages is a complex one, bound as it is in many ways with the legal rights of the owner in regard to the land. These rights do not seem to be well-defined. As the ownership of land rests in the village community, the grantee has no saleable or mortgage rights over the lands to serve as security for intermediate or long-term credit. Thus one of the difficult problems in Gramdan villages is the setting up of an alternative agency to meet medium and long-term credit needs of the cultivators. The problem is also related to wider issues connected with the development and rehabilitation of a very underdeveloped class of the population. There is recognition of the need for provision of a sound co-operative structure in Gramdan villages, adapted to local conditions.

¹² See Report on Gramdan in Koraput, Land Reforms Division, Planning Commission, Government of India, 1958 (Cyclostyled) pp. 6-7.

The organisation of all economic activities for the benefit of the community is the major problem in Gramdan villages. The responsibilities and functions of the Gramdan authority are varied and great. It is, therefore, of great importance to set up the right type of organisation suited to every Gramdan area and to give the Gramdan villages the leadership they need. A large part of the developmental investment will have to be undertaken on a community or co-operative basis. The combined resources of a Gramdan community in money and management ability, etc., may not be adequate to meet all the developmental needs of the village. In the initial stages, it may require the help of some outside agency. As has been remarked by Prof. Gadgil,¹³ "Wherever the Gramdan experiment is conducted in a substantial measure, very special legal and administrative provisions would be required to give it a fair trial; these could not be made perfect within a short time, and a large amount of sympathetic experimentation could alone prove what is required."

Conclusion

From the foregoing, it is clear that there seems to be some similarity in the objectives of the Gramdan movement and the Community Development and National Extension Service. But there is no co-ordination between them. Hitherto there has been little activity in the Gramdan villages which formed part of the community projects and the national extension service. There is urgent need to integrate the programme of community development in the Gramdan villages. The implementation of the programme in the Gramdan villages has now been entrusted to the extension organisation set up by the Government at the block and village levels. The extension organisation would be assisted by the *Sarva Seva Sangh*. It has been suggested that intensive schemes should be initiated in a few pilot areas in Gramdan villages with a view to promoting rapid economic advancement of the very backward classes of the rural population. The development programme should foster the spirit of community cohesion which is initially generated by Gramdan. It should help in the development of self-reliance in the individual and initiative in the com-

¹³ "Gramdan—Implications and Possibilities", *The Indian Journal of Agricultural Economics*, Vol. XII, No. 4, October-December, 1957, p. 10.

munity so as to enable the people to manage their affairs themselves and to make the villages self-governing units. In judging the performance of Gramdan villages, a large margin of tolerance will have to be allowed because of the immense variety in circumstances in the country. There should, however, be some overall direction and responsibility for continuous progress.

PART III
CONSTRUCTIVE RURAL SOCIOLOGY
TOWARDS A PLANNED ECONOMY

THE INDIAN RURAL PROBLEM—A REVIEW

The facts of the rural problem in India in its various aspects have been set out in Part I. In Part II a review has been attempted of the evolution of agricultural policy and of the legislative measures and other developments over the last few decades since the rural problem came to be regarded as one of some urgency. In this concluding Part, it is proposed to bring together the essential points of a connected approach to the Indian rural problem and to relate it to the concept of developmental planning envisaged in our Plans.

THE RURAL ECONOMY

We may start with a broad picture of the rural economy as we see it at the present juncture. It is undoubtedly true that in the last few years the rural economy has begun to respond to the expansionary stimuli generated by the various measures taken to promote economic development. By and large, however, despite considerable progress in irrigation and the change from subsistence to commercial farming in respect of certain crops, the rural economy has remained largely static. As the previous Chapters have indicated, the age-old structure of rural society was disturbed by the impact of the new individualistic ideas of property, contractual relations and centralised administration that were introduced during the British regime. The transition has been prolonged and it has not been a purposive one. The rural economy, in other words, could no longer continue to function as in the old days, nor was it able to adopt new ways of work and living in conformity with the requirements of a growing economy. Of the total population of 357 million in 1951, 83 per cent was in rural areas. In other words, in spite of the development of some large and medium-scale industries, nearly 5 out of every 6 Indians lived in rural areas. Agriculture is still the mainstay of

life for 7 out of every 10 in the population. Taking the rural area by itself, 4 out of every 5 self-supporting persons who live in it are agriculturists and 1 in every 8 self-supporting persons in the urban areas is also an agriculturist. Some 45 to 48 per cent of India's national income is derived from agriculture and allied occupations. It is obvious that economic prosperity and planning for development in a country like India must concentrate on improving the technical efficiency of agriculture and raising the standard of living of the farmer.

The factors responsible for the continued stagnancy of Indian agriculture have been stated in the earlier Chapters. Briefly the diagnosis is that the Indian economy has not been able for decades past to generate sufficient savings to support an investment programme which would make it possible for the growing population to secure larger *per capita* incomes. In fact, the entire socio-economic climate was unsuited to high levels of investment. Agricultural practices continued for the most part along old traditional lines, which could not yield enough food and raw materials to support a more progressive or diversified economic structure. The rural economy—and therefore the Indian economy as a whole—settled down to what in recent literature has come to be called an under-development equilibrium with low levels of productivity, poor techniques of production, a high degree of under-employment and a stagnation of incomes and living standards.

THE FOOD "GAP"

The population in India has grown rapidly since the beginning of the 20th century. Between 1901 and 1951, while population increased by 44 per cent, both the acreage under cultivation and the irrigated area increased by only 18 per cent.¹ Whether we regard this as the proverbial Malthusian devil, or characterise the phenomenon in terms of under-development, the position essentially is that the average holding of the cultivator is much too small and the extent to which he can improve yields on these small holdings has been limited by the insufficiency of the surplus he can invest. The various legislative and other measures taken to help the farmer have been slow and diffused, and their benefits have

¹ Census of India, 1951, Volume I, India, Part I-B—Appendices to the Census Report, 1951, pp. 48-49.

been to a large extent cancelled by the growth of population and the progressive shrinkage, *per capita*, of the basic instrument of production, namely, land. Regulation of rent, control of usurious interest rates, restrictions on transfer of land, and similar measures to protect the tiller cannot solve the problem so long as the pressure on land continues and other avenues of employment have not opened out.

Various Commissions and Committees have reported on the growing imbalance between requirements of food and raw materials and the rate of growth of agricultural production. The Census Report of 1951, the Foodgrains Enquiry Committee (1957), and more recently the Agricultural Production Team sponsored by the Ford Foundation (1959) have stressed the need for rapid and substantial increases in agricultural production if this imbalance is to be rectified in the foreseeable future. Until 1950 or so, population growth in India was about 1.3 per cent per annum. The study made a few years ago by Messrs. Coale and Hoover has shown that the rate of increase of population has risen in recent years to about 2 per cent per annum and is likely to rise further, unless family planning and other prudential checks come into operation on a large scale. The Census Report of 1951 predicted, on certain assumptions, a total population of 408 million in 1961, 458 million in 1971 and 527 million in 1981. It pointed out that even on this basis there would be a growing gap between demand and supply of food and other agricultural products.² Messrs. Coale and Hoover have attempted three different projections of population growth on the basis of the most likely course of mortality and three different types of assumptions regarding the trend of fertility. According to their middle projection, population in India will go up from 424 million in 1961 to 473 million by 1966 and to 524 million by 1971.³ This is on the assumption that the birth rates will start declining before long. It is an observed fact that death rates can be reduced quickly with the help of modern devices to control epidemics and diseases; they have come down already in India and in several other countries. In this situation, a decline in birth rates is imperative. There is

² Census of India, 1951, Volume I, India, Part I-A—Report, 1953, pp. 193-194.

³ Coale, Ansley J and Hoover, Edgar M: Population Growth and Economic Development in Low-Income Countries, Princeton University Press, Princeton, New Jersey, 1958, pp. 34 and 239.

considerable literature purporting to show how the world is becoming rapidly over-populated and what a menace the rising rates of population growth in several parts of the world can be. While one need not deny the infinite possibilities of modern science and human inventiveness, there can be no doubt that control of population growth has to be an integral part of the effort at developmental planning in India.

The point to note for the immediate present is that the average increase of 3 per cent per annum in agricultural production that has been achieved in recent years is quite inadequate to support the increasing population at higher levels of living. It is immaterial whether the gap between demands and supplies at the present time is assumed to be just equal to the net imports of 3 million tons or so of foodgrains per year or somewhat more on the ground that even these imports have not been able to prevent an increase in domestic prices. The fact is that the country's needs are expanding rapidly and the plans for further development will be seriously jeopardised, if agricultural production does not rise rapidly. In assessing the requirements for the future, it is also important to bear in mind that with growing incomes the demand will shift from inferior cereals to superior cereals, and from cereals to non-cereals and other types of food, which will require an intensification of agriculture. Also, as important as increased food production is larger production of the raw materials needed to supply the needs of growing industries. The Indian rural problem is thus not merely a problem concerning the rural population; it is part of the problem to the further development of the entire economy. More and more, the problem merges into that of all-round economic and social development. Changes have to proceed both within the rural economy and outside in order to get the best results.

THE RURAL SOCIAL STRUCTURE

While studying the Indian rural problem and the ways and means of tackling it, it is essential to bear in mind the complexity of the rural structure. This structure has evolved through the centuries and it shows diversities from region to region. Yet, one discerns behind this diversity a certain uniformity of pattern. The institution of caste is still the most important single aspect of rural social life. This system has lost its rigidity to some extent,

but it still determines the choice of occupation and is the basis of the relationship between different classes in the village. By and large, the social structure in the rural areas still remains feudal and hierarchical in character.

The complexity of the problem of rural reconstruction arises from the fact that rural society comprises members with varying capacities for adaptation to the new ways of cultivation and with varying standards of efficiency as well as education. The higher castes, as a rule, do not freely associate themselves with the lower castes on social and religious occasions, nor are the lower castes in a position to break custom and tradition. Economic and social co-operation tends, therefore, to be confined to persons within the same caste. For instance, in the village Bhuvel in the former Baroda State,⁴ there were some eighteen castes, and persons of higher castes did not interdine with those of lower castes. Some castes did not permit interdining with persons even of the so-called superior castes. The rules regarding inter-marrying were still more rigid. So great is the hold of the caste system that some of the lower castes have to live only at the periphery of the village. Untouchability and numerous handicaps associated with it persist in spite of social legislation, and it must not be forgotten that some thirty million of the rural population are tribals and Harijans who are socially, economically and educationally backward.

It is difficult to describe the gradations of rural society in any simple terms. The census classification divides population dependent on agriculture (which is not the same thing as the rural population) into four broad livelihood classes: (i) cultivating owners, (ii) tenant cultivators, (iii) agricultural labourers and (iv) non-cultivating owners of land and other agricultural rent-receivers. This classification does not exhaust the entire rural population. In addition to those deriving their livelihood from agriculture, there are in the rural society (v) traders and trader-moneylenders, (vi) village artisans and craftsmen and (vii) the so-called 'elite,' *i.e.*, the village officials, teachers and priests. It is, of course, not to be expected that all these classes can be found in all villages, but these are the different recognisable elements in the rural community taken in the aggregate.

⁴ See Bhuvel: Socio-Economic Survey of a Village, Indian Society of Agricultural Economics, Bombay, 1949, pp. 107-117.

According to the 1951 census the total rural population was 29.5 crores, of which those deriving their livelihood from cultivation constituted 66 per cent and agricultural labourers and their dependents 15 per cent. The rest of the rural population consisted of non-cultivating owners of land and rentiers and their dependents (1 per cent), as also those deriving their livelihood from non-agricultural occupations. Data since then are not available but it is legitimate to assume that there has been no significant change in this pattern.⁵

The bulk of the rural population consists of cultivators, *i.e.*, the first two categories mentioned above. But they are not all of equal social or economic strength. According to the Rural Credit Survey, 58 per cent of the total sown area was cultivated by 30 per cent of the cultivators with an average of over 15 acres per cultivator. Within this group, the first 10 per cent—the 'big' cultivators—cultivated 30 per cent of the total sown area. The 'medium' cultivators—*i.e.*, the next 40 per cent of the total cultivators—were responsible for cultivating about 30 per cent of the sown area, the average per 'medium' cultivator being over 6 acres. The remaining 12 per cent of the sown area was cultivated by the 'small' cultivators comprising the remaining 30 per cent of the cultivators, each cultivating on an average about 3 acres of land. By 1956-57, the share of the 'big' and 'large' cultivators in the total sown area had increased in two out of the three districts for which comparable data are available in the Rural Credit Follow-Up Survey (1956-57). The share of the big cultivators increased from 29.9 per cent in 1951-52 to 32.8 per cent in 1956-57 in Broach; and from 41.7 per cent to 44 per cent in West Godavari. It came down from 40.6 per cent to 36.5 per cent in Coimbatore. The share of large cultivators at the two dates was 60.1 and 63.1 per cent respectively in Broach; 69.3 and 72.6 per cent in West Godavari and 68.1 and 64.3 per cent in Coimbatore.⁶

5 According to estimates of the Planning Commission, rural population increased by 6 per cent and urban population by 18.1 per cent between 1951 and 1956; Outlook on Employment, Ministry of Labour and Employment and Planning Commission, Government of India, New Delhi, 1959. Assuming the same rate of growth in subsequent years, rural population in 1959 would be about 33 crores, *i.e.*, 78 per cent of the total.

6 All-India Rural Credit Survey, Report of the Committee of Direction, Volume I, The Survey Report, Part I (Rural Families), Reserve Bank of India, Bombay, 1956, p. 51; Rural Credit Follow-Up Survey 1956-57, General Review Report, Reserve Bank of India, Bombay, 1960, pp. 24 and 264.

The third category, namely, landless labourers and their dependents constituted about 15 per cent of the total agricultural population. The fact that they do not own land marks them out as a separate category. Both economically and socially, they rank lower than the small agriculturists mentioned above. Of the 5.5 crores of the rural population which depended for its livelihood on non-agricultural occupations (*i.e.*, categories v to vii mentioned above), 1.7 crores were "self-supporting." Among the "self-supporting" persons in the non-agricultural classes, some 29 per cent were engaged in processing of foodstuffs, manufacturing of textiles and other cottage and small-scale industries; some 13 per cent derived their livelihood from other primary industries including animal husbandry, forestry, fishery, etc. The rest were engaged in trade, professions, services and other occupations. The traders are numerically not large but they are important both economically and socially and often combine money-lending with trade. Among the professional and service classes are the village officials in charge of important administrative duties and the teachers and the priests who form the intelligentsia. The official functionaries have often tended to regard themselves as a class apart, that is, as servants of government rather than of the village community; the teachers and priests have not been in a position to offer much leadership.

VILLAGE ADMINISTRATION

Attempts have been made in recent years to strengthen and revitalise the system of village administration, with emphasis particularly on self-governing institutions like the Village Panchayat. In the old days, the administration of the village was largely self-centred, the leading families, usually those who formed the village, having an important role in it. The headman was a sort of *pater familias*, governed by *noblesse oblige* and bound by the prevailing notions of social behaviour and conduct of community affairs. The emphasis of administration was more on the enforcement of obligations rather than on exercise of rights. The management of the temple and the school, the relief of the disabled and the distressed, the management of public health and sanitation, the execution and maintenance of public works and the settlement of disputes were the legitimate responsibility of the village community as a whole functioning under the leadership of the headman. This

system broke down in the latter half of the nineteenth century and a struggle ensued between various social classes for capture of power through ownership of property and the ability to finance agricultural and other operations. Village feuds and factions thus came into being.

THE LAND SYSTEM

The task of welding these diverse elements in the village into a well-knit and progressive community is not an easy one. The most important single problem in this field is the reform of the land system. The broad lines of this reform have emerged clearly in recent years. The first step in this direction has been the abolition of intermediary tenures. Simultaneously, rents have been regulated and the cultivator has been given security of tenure. The imposition of a ceiling on land holdings has been accepted in principle and almost all States have passed legislation imposing the limit on further acquisitions. Legislation for fixation of a limit on existing holdings also has been passed in several States and is under consideration in others. Several questions, however, remain unsolved, and the implementation of the programme of imposing ceilings on existing holdings has been slowed down partly because of the lack of clarity as to the objective in view. The measures taken for regulation of rent and for protection of tenants are also not fully effective because of the prevailing land hunger and the weak bargaining position of the tenant. The very enunciation of the programme of land reforms resulted in the eviction of tenants on a considerable scale. It was comparatively easy to dislodge the functionless zamindar and other similar intermediaries from their position, but the problem becomes difficult when it comes to dealing with large or middle farmers. The transition has already lasted too long and the sooner the programme of land reforms is completed, the better. Tardy implementation and prolonged uncertainty in regard to land reforms impede the progress of improvements in agriculture and create social unrest in the rural areas.

There are, theoretically, several patterns of land ownership and land use that can be thought of, but considering the economic situation in realistic terms there is no practicable alternative in our conditions to a system of peasant proprietorship supplemented

by a system of co-operatives. It may be urged that creation of peasant proprietorship will only perpetuate an inefficient system ; for, the small cultivator will have neither the means nor the technical knowledge required to make the best use of his land. There is force in this contention. But, it has to be recognised that a mere change in the land system will not by itself revolutionise agriculture. The reform of the land system can create the conditions in which there is an incentive for the tiller of the soil to increase production and to adopt new ways of land-utilisation. He may still not have the means. For this, he needs the support of institutional agencies, governmental and co-operative.

To make peasant farming progressive and profitable, it is thus necessary to institutionalise credit, to link up credit with marketing and to make available to the farmer the results of research through the newly set-up extension agencies. Measures have also to be taken to take the surplus population away from land and to increase, to the extent possible, the opportunities for employment in rural industries. The co-operative movement has still drawn in only a small section of agriculturists and there is a long way to go before co-operative farming can be worked successfully over large parts of the country. In the reorganisation of the land system it is important to stress that individual property rights in land cannot be absolute, and limitations on transfer, on sub-division and even on inheritance will have to be accepted. However, in a democratic system it is to the extent that the superiority of co-operative action and organisation is demonstrated that progress in that direction is possible.

POLICY FOR DEVELOPMENT

It will be clear from the above that the approach to the rural problem is no longer in terms of remedying particular evils or shortcomings; it is in terms of lifting the rural economy from its age-old ruts and linking up the developments in the rural sector with those in the economy as a whole. The economic and social amelioration of the rural population cannot be achieved merely by reforms designed to improve this or that aspect of rural life. Agricultural reform must touch all aspects of rural life and its problems. In this connection the following quotation from the American Year-Book (1940) "Farmers in a Changing World" is of interest.

"Rural sociology has as its primary aim the well-being of the farm population. It originated as a recognized discipline in teaching and research less than 25 years ago as a part of the general impulse to improve agriculture technologically, economically and socially. Since then it has developed quite an elaborate body of research findings, but it has not yet brought to bear the full impact of available knowledge either from general sociology or from studies made in fields other than agriculture..... Owing to the fact that social causes are complex and sometimes deeply laid in the past history of social institutions, recognition of the existence of problems is the necessary first step in their solution. It is the function of sociology, therefore, to reveal problems as well as to assist in solving them. The roots of some of our most distressing agricultural problems are in part social, in part psychological and in part cultural."⁷

What has been said about the rural economy of the United States of America holds with even greater force for India. These considerations are particularly important at this juncture when the rural sector has, on the one hand, to make a larger contribution to the development of the rest of the economy and has, on the other, to obtain the necessary support and stimulus from the other rapidly growing sectors. The essence of developmental policy is thus the adoption of a wider economic and sociological approach related to the basic objectives and pattern of India's development plans.

There is a tendency among certain social workers and thinkers to postulate a sharp cleavage between the interests of agriculture or of rural society and the growth of industries or the prosperity of the urban population. But, this cleavage or conflict of interest is more apparent than real. Not only is there no conflict between development of agriculture and industrialisation; the two are, in fact, complementary. Industrialisation is essential for raising

7 Farmers in a Changing World, United States Department of Agriculture, 1940, p. 1043.

the overall rate of growth of the economy. As new industries develop, the demands for power, for transport and communications and for social services go up too. These, in turn, benefit the rural sector by creating employment opportunities for the surplus labour force which at present somehow subsists on the land. A rising demand for food and raw materials is a condition precedent to a progressive improvement in rural productivity and incomes. But, of course, industrialisation cannot succeed unless agriculture becomes more and more productive.

Policy in the field of agriculture must have three main elements. Firstly, it must aim at an enlargement of economic and social overheads like irrigation, power, roads, facilities for research and extension. Secondly, it must aim at improving the wherewithals of production which the farmer himself has to provide. This necessitates well-organised supply of seed, fertilizers and credit and marketing facilities. Thirdly, the unit of farm operations and management has to be progressively enlarged. This is the central problem in the reform of the land system. Only with simultaneous development along all these lines and with co-ordinated effort to develop the economy as a whole, can programmes for raising incomes and improving the conditions of life in the rural areas be carried through successfully.

The Central and State Governments have an important role to play in bringing about the necessary transformation of the rural economy. The Central Government lays down broad policies and provides the necessary technical advice and financial assistance. The State Governments are directly responsible for implementation of the programmes of development on the spot. They are directly in touch with the people and they alone can implement rural reconstruction programmes with the necessary flexibility and imagination. But, their resources, both financial and in terms of research facilities, are limited. Some of them are not in a position to get the services of expert advisers. They must, therefore, be helped by the Centre with expert advice and financial assistance. The efforts of the Centre have also to be directed towards reduction in regional disparities in development; the special needs of the less developed regions have to receive due attention. In the early stages, the problem is particularly difficult because the total resources

available are inadequate in relation to needs. But as development proceeds and more resources become available, the benefit of investments should be increasingly extended to under-developed regions. Only thus can a diversified economy be built up. The successful implementation of the various plans of agricultural reform and reconstruction depends in a large measure on the extent to which the Centre takes the initiative and co-ordinates the work being done under the State Governments. Plans as well as the performance in respect of them have to be evaluated on an all-India basis.

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The problem of reorganising the rural economy thus calls for an integrated approach. While the principal aim is increased production and incomes, this itself requires large institutional changes. The problem has presented difficulties even in completely centralised planning systems. Under democratic conditions the role of the State is to create a climate in which the farmer has the incentive and the means to adopt modern techniques of production and so to secure for himself a rising level of incomes. Both official and non-official agencies have to work together to this end. One of the lessons of the various experiments that have been made in the past in the field of rural reconstruction and reform is that a partial or mechanistic approach to these problems has serious limitations. The farmer cannot, in the last analysis, be dragged or coerced; his willing consent and active co-operation have to be enlisted. Whether it is the use of irrigation water or of improved seed or fertilizer or whether it is the problem of organising service co-operatives or co-operative farming, the success of any effort in the rural field must depend primarily on the response of the farmer to the efforts of public authorities. It is here that partial approaches to the rural problem and approaches in terms only of economic amelioration fail to bear fruit. The rural problem in a country like India with its long traditions and complex social structure goes to the very root of community life in the villages, and it is only through a broad sociological approach in terms of economic incentives, administrative organisation and social improvement that a solution can be found.

CHAPTER XIX

OBJECTIVES AND TECHNIQUES OF INDIA'S PLANS

In the preceding Chapter, we have indicated the need for an integrated approach to the problem of rural life, and indeed, to the whole problem of developing the economy. Economic development is a process not merely of increasing the supplies of material goods but also of ensuring that simultaneously a steady advance is made towards the realisation of wider objectives such as full employment and reduction in economic and social inequality. None of these objectives can be pursued to the exclusion of others; and a plan of development must place balanced emphasis on all these.¹ The attainment of even the limited objective of increased production would not be possible without constantly keeping in mind and steadily pursuing the wider objectives of social policy. On the other hand, equality and social justice will have little content, unless there is a progressive increase in production. Developmental planning must necessarily have a broad social perspective.

TYPES OF PLANNING

There are, it must be admitted, bound to be differences of opinion as to the means to be adopted in relation to the objectives and the desirable tempo of economic change to be introduced. There are differences, too, as to the appropriate coverage of plans. Some countries, especially those that are highly industrialised, find it sufficient for their purposes to make plans regarding particular sectors of the economy, *e.g.*, modernisation of industry, or development of depressed areas, or correction of some unhealthy trends in respect of domestic inflation or the balance of payments. But, a development plan in a country like ours has to cover all aspects of the economy. Agricultural development cannot proceed far without the development of transport, power and industries, and little stable progress in these latter can be achieved unless

¹ Report on the First Five-Year Plan, p. 28.

the agricultural base of the economy is adequately strengthened. Broadly speaking, there are two alternative approaches to developmental planning—one through authoritarian methods and the other through democratic processes and institutions. Development through authoritarian methods seems more efficient in the short run, but it involves sacrifice of certain basic values. India's approach is governed by the basic democratic tenets of the Constitution and the Directive Principles of State policy. In this approach, the State has an important role, but its role is, in the last analysis, promotional and educational rather than dictatorial. This accords with the moral values stressed by Mahatma Gandhi and latterly by Acharya Vinoba Bhave. This approach recognises that long range planning is essential and that institutions which no longer minister to human needs must be modified. But, the test always is: what system of institutions fosters best the development of human personality.

"PLANNING" BEFORE INDEPENDENCE

There was, even before Independence, considerable discussion in India on economic planning and its implications. The trends in the evolution of ideas on planning were indicated in the programme of Indian political parties. The Indian National Congress was, however, the only organisation that had a definite programme for rural reconstruction. The other parties adopted economic programmes more or less similar to those of the Congress Party. The rural reconstruction programme of the Indian National Congress was embodied in two resolutions, one passed at Karachi in 1931 and the other at Faizpur in 1936. In that programme, reform of land tenures, the strengthening of the co-operative movement and the revival of village industries had a prominent place.

In accordance with these objectives, when the popular Ministries assumed office in 1937, they launched upon extensive measures of tenancy reform. The National Planning Committee was appointed in 1938 under the presidentship of Shri Jawaharlal Nehru. The co-operation of all the Provincial Governments and of the Government of India was secured in this work. Various aspects of the Indian economic problem were considered in a number of sub-committees and reports on these aspects were issued, though the National Planning Committee itself had no opportunity of

considering them as a whole. The resignation of the Congress Ministries and the state of political tension in the country did not permit this work to proceed further. It was not until the attainment of Independence and the adoption of the Constitution that the first steps were taken to evolve a comprehensive national plan.

PREAMBLE OF THE CONSTITUTION

India's Constitution guarantees to all its citizens the fundamental rights of equality before law, equality of opportunity in matters of public employment, the right to freedom of speech, non-discrimination on grounds of religion, race, caste, sex, or place of birth, and right to property under the law, among others. All laws in force should conform to these fundamental rights.² Apart from these fundamental rights, the Constitution also lays down certain Directive Principles of State Policy, which are the foundation for the pattern of developmental planning in the country.

DIRECTIVE PRINCIPLES OF STATE POLICY³

The Directive Principles lay down that the State shall strive to promote the welfare of the people by securing and protecting, as effectively as it may, a social order in which social, economic and political justice shall inform all the institutions of national life. The State shall in particular direct its policy towards securing that (a) the citizens, men and women equally, have the right to an adequate means of livelihood, (b) the ownership and control of the material resources of the community are so distributed as best to subserve the common good, (c) the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment, (d) there is equal pay for equal work for both men and women, (e) the health and strength of workers, men and women, and the tender age of children are not abused and citizens are not forced by economic necessity to enter avocations unsuited to their age or strength, (f) childhood and youth are protected against exploitation and against moral and material abandonment, (g) the State shall take steps to organise village panchayats and endow them with such powers and authority, as may be necessary, to enable them to function as units of self-government, (h) the State shall, within the limits of its economic

² The Constitution of India, Government of India, 1949, Part III, p. 7.

³ *Ibid.*, Part IV, pp. 23-25.

capacity and development, make effective provision for securing the right to work, to education and to public assistance in cases of unemployment, old age, sickness and disablement and in other cases of undeserved want. Besides, provisions for securing just and humane conditions of work and for protection of vulnerable classes in society have been included. These statements are indicative of the social philosophy of democratic government in India. India's plans have to fit into these system of economic and social ends.

THE PLANNING COMMISSION

Immediately after Independence, India was faced with serious problems of economic dislocation following the War and Partition of the country. There were large movements of population from across the borders which had to be absorbed and rehabilitated. There was the task of integrating the princely States with the new democratic set-up. The Constitution had to be framed and adopted. These problems were taken in hand and dealt with expeditiously and efficiently, and early in 1950 the Government of India decided to appoint the Planning Commission to take in hand the long-standing problems of under-development and poverty. The Planning Commission was asked to make an assessment of the material, capital and human resources of the country and to work out plans for development on the basis of the most effective utilisation of these resources, taking into account a suitable pattern of priorities designed to ensure orderly but rapid progress.

It is important to note that the Planning Commission is an advisory body. It consists of men with wide experience in administration and in public life. It is presided over by the Prime Minister, but its day-to-day work is directed by the Deputy Chairman who is not a member of the Cabinet. The Commission works in close collaboration with the Central Ministries and the State Governments. It also keeps in touch with business and industry in the private sector. It must be emphasised that the role of the Commission is essentially one of study, research, assessment of planning techniques and evaluation of policies and not of administration or execution of programmes. There are arrangements for co-ordination of work with the various Ministries both at the level of Members and of officials. The Secretary of the Planning Commission is

also Secretary to the Cabinet. The State Governments come into the system of planning not only through periodical conferences with officials in respect of their plans, their resources and other allied matters, but also through the National Development Council, which comprises, besides the Planning Commission and certain members of the Cabinet at the Centre, the Chief Ministers of all the States. The setting up of the Planning Commission does not in any way alter the constitutional responsibilities either of the Centre or of the States. The function of the Planning Commission is to take a co-ordinated view of the requirements of the economy, immediate as well as long-term, to consider and advise on the problem of resources and the best means of augmenting them from an overall national angle, to define priorities, to watch the implementation of plans and to formulate policies affecting the realisation of the objectives and targets set in the plans. This innovation, not provided for in the Constitution, of a deliberative and advisory body has worked exceedingly well. It has focussed the attention both of the public and of the various governmental agencies on problems rather beyond the normal run of current policies—on problems which are no less vital for continued and progressive economic development.

PERSPECTIVE OF PLANS

India's First Five-Year Plan was, in a sense, a rationalisation and co-ordination of a number of schemes and projects which had been begun or which were about to begin in various parts of the country in pursuance of what was called the post-war reconstruction programme. When the First Plan was launched, there were inflationary pressures in the economy and it was important to evolve an orderly and balanced pattern of investments. It would, however, be wrong to assess the significance of the First Five-Year Plan only in these terms. The First Plan document gave a systematic exposition of the crucial elements in development and defined the objectives, priorities and techniques of democratic development, not only in the light of the investments to be undertaken within the period of the Plan, but also from the more basic aspect of lifting the economy from stagnation and setting it on the path to progress. The Plan put forward a broad picture of the rates of growth of national income, savings and investment to be achieved over a period of twenty-five years or so and enunciated

policies affecting various institutional and structural changes needed in order to make the economy more responsive to the developmental impulse.

The Second Plan envisaged an average rate of growth of five per cent per annum of national income as compared to the realised rate of $3\frac{1}{2}$ per cent over the First Plan period. It set the goal of a doubling of *per capita* national income by 1973-74. Table I presents a synoptic view of the increasing tempo of development postulated in the Second Plan.

TABLE I
GROWTH IN INCOME AND INVESTMENT: 1951-1976⁴

	First Plan 1951-56	Second Plan 1956-61	Third Plan 1961-66	Fourth Plan 1966-71	Fifth Plan 1971-76
1. National Income at the end of the period (Rs. crores)	10,800	13,480	17,260	21,680	27,270
2. Total Net Investment (Rs. crores)	3,100	6,200	9,900	14,800	20,700
3. Investment as percentage of national income at the end of the period ..	7.3	10.7	13.7	16.0	17.0
4. Population (in Millions)	384	408	434	465	500
5. Incremental Capital—Output ratio	1.88:1	2.30:1	2.62:1	3.36:1	3.70:1
6. Per capita income at the end of the period (in Rs.)	281	331	396	466	546

The principal object of this model was to highlight the step-up in investment effort required to raise national income at the rates envisaged. The experience of the Second Plan has shown that the achievement of these rising rates of investment is not easy. There is need for considerable external assistance in the initial stages of development. This aspect of the problem apart, the key factor in development is the response of the agricultural

sector. Investible resources can grow only as the community's total output increases, and this, in a predominantly agricultural country, pre-supposes a highly progressive agriculture.

TECHNIQUES OF PLANNING

The techniques of planning in India follow to a large extent from the democratic approach which has been accepted as the basis of the economic and political system. The targets of investment and output can be achieved through direct State action only in so far as certain investments are to be undertaken in the public sector. The plans envisage a rapid expansion of this sector. But there is a large private sector in industry, trade, agriculture and services, the targets in respect of which can materialise only in so far as the response of private enterprise is adequate. The State can direct and assist, but the formulation and execution of programmes in these fields is the responsibility of private enterprise. Public co-operation and participation are thus vital factors for securing the pace and pattern of development envisaged in India's plans. The economic policy of Government and the institutional changes like land reforms, co-operative organisation, and revitalisation of village panchayats and other local self-governing agencies have all to be designed to secure and promote such co-operation.

An important question that arises in this connection is how in an economy in which agricultural production is in the hands of millions of small farmers all over the country, the targets of increase for the different agricultural commodities are to be framed and—more difficult still—how the achievement of these targets is to be ensured. The formulation of targets at the national level is primarily an exercise in forecasting the level of demand for various agricultural products over the period concerned. It is essential for this purpose to form an idea of the increase in national income over the period of the plan and to assess on the basis of the known relationships between incomes and demand the likely increases in output required in various lines. It is possible to estimate broadly from the available data on the trends of consumer expenditure the proportion of expenditure on, say, food, to total expenditure. On the basis of the data available it would appear that if national income goes up by 25 per cent an increase in foodgrains production of the order of 7/10ths of this total, *i.e.*, about 18 per cent should

be adequate. The criteria for judging the required increases in the output of raw materials like cotton, jute and oilseeds are more complex. The demand in this case depends not on direct consumer expenditure but on the demand for the products to be manufactured from these raw materials. It is necessary in this connection to take into account not only the requirements of domestic production but also of exports.

These over-all estimates can provide broad indications as to the targets to be aimed at, but decisions can finally be taken only on the basis of the estimates made by State Governments and local authorities regarding the increases that can be secured in various areas or regions on the basis of certain investments. The fixation of agricultural targets thus involves several rounds of discussions between the Central planning authorities and the executing agencies at the State and local levels. The latter have to work out the increases they can secure given a certain ceiling for outlays. If this level of outlays is not adequate, the question of providing larger allocations would have to be considered. It is not, however, possible to arrive at the total allocation for agriculture on the basis merely of these estimates. Allocations in each field have to be judged in terms of relative priorities and the over-all availability of resources. The important point is that the formulation of agricultural targets has to be attempted on the basis of the best judgments that can be formed as to the relationship between investments of various types, such as major and minor irrigation, seeds, fertilizers, etc., and the resulting increases in outputs.

Since this relationship varies between region and region, one has to proceed in terms of certain yardsticks which have been arrived at on the basis of past experience. One could say then that a certain amount of fertilizer gives such-and-such increase in yields and therefore if so much fertilizer in the aggregate is made available the resulting increase in output must be such-and-such. The same holds for irrigation and the other inputs of agriculture. These inputs are inter-related and must therefore be applied in a co-ordinated way. Fertilizers, for example, cannot yield the expected results if the available water supply is inadequate. Success, therefore, depends upon how the various supplies and services needed by the farmer are brought together. Also, it is necessary when

large changes are occurring in the rural economy to re-assess the yardsticks to be used for formulation and assessment of input-output targets.

The next question to consider in this connection is how it is to be ensured that the acreage under various crops and the inputs by way of seed, water, fertilizer, etc., correspond to the targets of increased production. In other words, how can it be secured that the investment effort in agriculture does not go into the production of, say, cotton or groundnut when what is required is an increase in foodgrains rather than in these commodities. Obviously, the farmer makes these decisions in terms of the relative profitability of the various crops. To an extent it is true that certain crops are suitable for certain soils or types of climate and that the possibilities of substitution as between one crop and another are not unlimited. It is true also that the subsistence farmer is likely to be less influenced by consideration of profitability than a farmer producing commercial crops. Nevertheless, there is little doubt that the crop pattern changes in response to the farmer's expectation of profit which obviously depends upon relative prices. It is for this reason that Government has to endeavour to maintain an appropriate relationship between prices, such that it provides an incentive for expansion of output in the more desired lines. Price policy is thus an important aspect of the planning techniques.

On the one hand, the farmer must be assured a fair return for his effort. On the other hand, the interests of consumers have to be safeguarded. The problem of incentives cannot be judged with reference only to how the producer will react. Higher prices for agricultural products react on the entire price structure. It has also to be borne in mind that the benefit of higher prices does not always and necessarily accrue to the farmer; it is often appropriated by middlemen. Price policy for agriculture has thus to take into account institutional factors as well.

It has also to be recognised that price trends can be influenced within limits. Excessive rises or falls can be prevented. Seasonal fluctuations can be moderated. But, attempts to maintain a structure of prices which diverges widely from the relative demand and supply situation cannot succeed over long periods. Regulation

of prices through Government purchases and sales, control of movements, zoning arrangements, etc., have their uses as planning techniques, and this is recognised in India's plans. But these plans do not envisage a rigid system of crop planning nor a system of extensive Government procurement and rationing. What is envisaged is increased productivity rather than acreage planning. Prescription of crop patterns by law or detailed controls such as procurement and rationing on an extensive scale react adversely on production sooner or later, and the need for many years to come is increased production not only of foodgrains but also of commercial crops.

Planning in India proceeds within a democratic framework and, in fact, the plans themselves are regarded as a means of strengthening the democratic system. The need for building from below has been stressed both in the First and the Second Plans. The aim is not merely more production—although this is crucial—but an enlargement of opportunities for growth at all levels. Rapid development of agriculture is the most difficult part of planning. The targets of production worked out are only broad indicators of the tasks to be attempted; their fulfilment depends on considerable degree upon factors not quite amenable to directives. It is essential for the success of the plans that effective steps are taken by way of investment of resources and the creation of conditions in which the agriculturist is enabled to improve upon his performance.

PRIORITY TO AGRICULTURE

As stated earlier, the First Five-Year Plan envisaged a modest programme of investment. But within this programme, it accorded the highest priority to agricultural development. Of the total outlay of over Rs. 2,000 crores for the Plan in the public sector, about 38 per cent was allocated to agriculture and community development, irrigation and multipurpose projects.

Table II shows the levels of production in agriculture in 1950-51 and the increases secured over the Plan period as compared to the targets originally proposed in the Plan:

TABLE II
AGRICULTURAL PRODUCTION: 1950-1956

Crop	Unit	Base year 1950- 51	Production					Addi- tional pro- duc- tion in 1955- 56 over 1950-51	First Plan target	
			1951- 52	1952- 53	1953- 54	1954- 55	1955- 56		Addi- tional	Total
Foodgrains	Million tons	54.0*	51.2	58.3	68.7	67.0	65.8	11.8†	7.6	61.6
Oilseeds	Lakh tons	50.8	49.5	46.6	52.9	63.0	56.4	5.8	4.0	54.8
Sugarcane	„	56.2	60.7	50.2	44.2	57.8	59.8	3.6	7.0	63.2
Cotton	Lakh bales	29.1	31.3	31.9	39.4	42.5	40.0	10.9	12.6	41.7
Jute	„	32.8	46.8	45.9	30.9	29.3	42.0	9.2	20.0	53.7
		1950- 51	1951- 52	1952- 53	1953- 54	1954- 55	1955- 56	1956- 57	1957- 58	1958- 59
Index of Agricultural Production (Base 1949-50=100)		95.6	97.5	102.0	114.3	117.0	116.9	123.6	114.6	131.0

* Base 1949-50.

† Partially revised estimate.

It will be seen that the increase in agricultural production over the First Plan period was encouraging. The output of foodgrains in 1955-56 was about 4 million tons above the target; the index of agricultural production (1949-50=100) showed a rise of about 22 per cent. It is important, however, to note that part of the increase in food production was the result of good monsoons and only part could be attributed to the investments undertaken in the course of the Plan period. It is not easy to segregate the increase in yields which resulted from the investments undertaken and those which could be attributed to the seasonal factor. Over the period of the First Plan, the seasonal factor has apparently had a fairly strong influence. This is shown by an analysis of State-wise data: the correlation between increase in yields and investments in the Plan is found to be very low. Of course, a considerable part of the development expenditure on agriculture consisted of investment in irrigation and the results of this could not all accrue during the Plan period itself. The effect of Central expenditures (of which State-wise breakdown is not available) are also not taken into

account. Table III shows the increase in production of foodgrains and the development expenditure in different States.

TABLE III
ABSOLUTE INCREASE IN PRODUCTION OF FOODGRAINS AND
DEVELOPMENT EXPENDITURE OF STATE GOVERNMENTS

States	Production			Total Development Expenditure by State Governments in 1951-56* (Rs. crores)	
	('000 tons)		Increase	Agriculture	Irrigation Projects
	Average 1949-50	Average 1954-55			
	to 1951-52	to 1956-57			
1	2	3	4	5	6
1. Andhra Pradesh ..	4,243	5,623	1,380	7.42	27.94
2. Assam	1,591	1,717	126	2.96	3.52
3. Bihar	4,751	4,762	11	12.05	12.52
4. Bombay.	6,031	7,823	1,792	22.17	37.75
5. Jammu & Kashmir ..	356	422	66	0.15	2.18
6. Kerala	684	912	228	2.38	5.12
7. Madhya Pradesh ..	5,433	7,714	2,281	17.89	4.91
8. Mysore	2,528	3,482	954	4.53	20.60
9. Madras	3,070	4,618	1,548	10.40	20.60
10. Orissa	2,258	2,551	293	1.57	2.56
11. Punjab	3,336	4,979	1,643	6.84	4.41
12. Rajasthan	1,313	4,068	2,755	2.19	6.11
13. Uttar Pradesh ..	11,187	12,386	1,199	16.11	28.41
14. West Bengal .. .	4,499	4,671	172	5.97	14.20
15. Delhi	30	34	4	0.62	0.05
16. Himachal Pradesh ..	197	241	44	0.29	0.39
17. Tripura	155	144	—11	0.05	—
18. Manipur	84	148	64	0.01	—
All-India	51,748†	66,296†	14,548	113.60	191.27

* Excluding expenditure on NES and CD Projects.

† Including the Andaman and Nicobar Islands and the Laccadive, Minicoy and Amindivi Islands.

N.B. Figures of development expenditure for the States of Andhra Pradesh, Bombay, Kerala, Madhya Pradesh, Mysore, Punjab and Rajasthan are estimated from the data given for pre-reorganised States.

The largest increases are recorded by Rajasthan and Madhya Pradesh where, with the merger of States, the system of reporting statistics and calculating the yields was improved considerably. Leaving these States out, Bombay, Madras and Punjab show the largest increases. Whereas development expenditure on agriculture in Bombay and Madras was fairly high, in Punjab it was not so high. Thus, it is not possible to say with confidence that investments and output were highly correlated during the First Plan period.

The Second Five-Year Plan was designed to secure a more rapid rate of growth in the economy. It aimed therefore at a more rapid development of industries, mining, power and transport than had been possible hitherto. There was a relative shift in priorities. Nevertheless, the Plan emphasised that agricultural development must be the basis of the development of all other sectors and that efforts in the direction of increasing agricultural production and especially the output of foodgrains should not only not be slackened but should be accelerated. The Plan, therefore, placed the target for food production at 80 million tons, *i.e.*, an increase of about 23 per cent over the level of production in 1955-56. Substantial increases in the output of cotton, jute and other agricultural products were also envisaged.

Table IV shows the trends in agricultural production since 1955-56 as against the targets of the First and Second Plan.

TABLE IV
AGRICULTURAL PRODUCTION AND PLAN TARGETS

(In Million tons unless otherwise indicated)

Commodities/Groups	Production				Targets of Production	
	1955-56	1956-57	1957-58*	1958-59†	1st Plan	2nd Plan
A. <i>Foodgrains</i>	65.79	68.75	62.51	73.50	61.6	80.5
(a) <i>Cereals</i>	54.92	57.23	53.00	61.29	52.5	68.0
(i) <i>Rice</i>	27.12	28.28	24.88	29.72	27.2	32.0
(ii) <i>Wheat</i>	8.62	9.31	7.74	6.69	8.3	11.5
(iii) <i>Other Cereals</i>	19.18	19.66	20.38	21.88	17.0	24.5
(b) <i>Pulses</i>	10.87	11.50	9.51	12.21	9.1	12.5
B. <i>Non-Foodgrains</i>						
(a) <i>Total Oilseeds</i>	5.64	6.18	6.05	6.92	5.5	7.6
(i) <i>Groundnut</i>	3.81	4.20	4.44	4.82	—	5.1
(ii) <i>Castorseed</i>	0.12	0.12	0.09	0.11	—	0.17
(b) <i>Sugarcane (in terms of gur)</i>	5.98	6.75	6.87	7.16	6.3	7.8
(c) <i>Cotton (Million bales)‡</i>	4.00	4.74	4.74	4.71	4.2	6.5
(d) <i>Jute (Million bales)¶</i>	4.20	4.29	4.05	5.18	5.4	5.5

* Partially Revised Estimates.

† Final Estimates.

‡ Bale=392 lbs.

¶ Bale=400 lbs.

Over the last 8 or 9 years the trend both in food production and in agricultural production as a whole has been upward. This is brought out more clearly in Table V, which shows the percentage increase in the average yield per acre for the three years ending 1958-59 as compared to the average yields for the three years ending 1951-52.

TABLE V

PERCENTAGE INCREASE IN AVERAGE YIELD OF CROPS PER ACRE

Foodgrains				Increase in yield	Commercial crops				Increase in yield
Rice	..	..	.	20.9	Sugar	..	..	..	6.0
Wheat	.	.	..	8.7	Cotton	..	.	.	16.3
Jowar	..	..	..	30.5	Jute	..	..	.	1.6
Bajra	..	.	.	10.8	Groundnut	..	..	..	3.4
Cereals	..	..	.	17.5	Oilseeds		..	..	9.4
Pulses	.	.	..	11.7					
Foodgrains	..	.	.	16.3					

This progress is, however, not adequate, considering the yields being obtained in other countries and the fact that the demands in the economy are growing rapidly. The recent trends of prices and the continued imports of about 3½ million tons of foodgrains a year for the last few years shows that a substantial increase in agricultural production and productivity is called for if economic development in the Third Plan is to proceed smoothly. In other words, agriculture will continue to have in the Third Plan a high priority.

APPROACH TO THE THIRD PLAN

The above review brings out that the battle for agricultural production has yet to be won. With rising levels of investment in the economy, the demand both for food and for raw materials has been going up sharply while the increase in agricultural production has averaged between 3 and 3.5 per cent per annum over

the last decade. The Third Five-Year Plan is still on the anvil. It is obvious that in terms of the essential objectives of development, it will be a continuation of the earlier Plans. The Third Plan should aim at a somewhat higher rate of increase in national income than was achieved in the Second Plan. It should also provide for a higher rate of investment in order not only to increase national income sufficiently in the next few years but also for the purpose of accelerating the future rate of growth of the economy. Current thinking on the Third Plan runs in terms of an aggregate investment target of about Rs. 10,000 crores so as to secure a rate of growth of national income of over 5 per cent per annum and to prepare the economy for an early 'take-off.' Even this rate of investment may not provide employment opportunities sufficient to absorb the increases expected in the labour force over the coming five years. This illustrates how difficult it is for an under-developed economy to absorb quickly the surplus of manpower it is confronted with. We devote a separate chapter to this subject in view of its importance.

The pattern of investment in the Third Plan, it has been stated authoritatively, will have in view the objective of making the economy self-sustaining within a period of ten years or so. This objective was implicit in the earlier formulations of the Plan, although the concept of self-sustaining growth has come into use prominently only in connection with the discussions on the Third Plan. The model of long-term growth of the economy to which reference was made earlier implied a step-up in savings sufficient to support the levels of investment indicated in the model. The balance of payments difficulties encountered in the Second Five-Year Plan have highlighted the need for planning the investment pattern in a way that would enable the country to sustain rising levels of investment on the basis of domestically produced capital goods and equipment. The essential idea of self-sustaining growth is that the economy should be able to generate sufficient savings to finance its investment requirements. The latter cannot, of course, be defined in any absolute terms ; investment requirements depend upon the rate of growth of income that is envisaged. Nevertheless, one could say in broad terms that the rate of investment of anything between 15 and 18 per cent of national income would be required in the conditions of India to ensure a rate of growth in

incomes that could be considered satisfactory. For this to happen on a stable and continuing basis, savings have to rise far more than has happened hitherto. A high priority for the production of capital goods and equipment within the country implies by definition that the community will have to forego the potential increases in consumption that could have been obtained through an alternative pattern of investment.

It would, however, serve little purpose if, while the country is concentrating on the production of more and more of the capital goods and equipment it needs, it still remains dependent on imports of food and raw materials. Development of that sort would amount to exchanging one type of imbalance for another — an imbalance that carries with it the dangers of a sharp reaction such as cannot but slow down the rate of growth of the economy. The Third Plan has therefore to keep an eye on both these vital facets of development — an increase in the capacity for producing capital goods and equipment and simultaneously a substantial advance in productivity in agriculture. It should also be stressed that the question is not one of a theoretical balance; the balance must be realised in fact. In other words, the programme for rapid industrialisation with its emphasis on capital goods and machinery will have to be sustained at each stage by a marked increase in the output of foodgrains and raw materials. Indeed, from the point of view of the agricultural community, not to mention the stability of the economy as a whole, the test of success of the Third Plan will be the degree of advance it can achieve in agricultural production.

Increases in agricultural output can be secured only if adequate inputs by way of seed, fertilizer, water, etc., are available. Considerable progress in these respects has been made in the last few years. The availability of ammonium sulphate has increased from about 3 lakh tons in 1951-52 to about 12 lakh tons by 1959. The supply of superphosphates has also increased more than three-fold from 83,000 tons in 1956 to 276,000 tons in 1959. Various schemes for the development of local manurial resources have also been undertaken. The production of urban compost, for instance, has increased from 1.62 million tons in 1951-52 to 2.30 million tons in 1958-59. About 22 million acres of land have been covered

under the green manure scheme. In order to popularise the use of improved seeds, a subsidy of Rs. 2.5 per maund is given. A recent study by the Committee on Plan Projects based on returns from 92 selected NES blocks shows that 48 per cent of the area under wheat was sown with improved varieties of seed. The proportion in the case of cotton was 30 per cent and for paddy 21 per cent.⁵ During the First Plan period, some 14 million acres received the benefit of additional irrigation facilities created by major, medium and minor irrigation schemes. In the first three years of the Second Plan, additional irrigation potential from major and medium schemes alone is estimated at 4 million acres.

It will be essential to step up these inputs further in order to get the desired results. There is need for more irrigation, medium and minor, rather than major. The multiplication and distribution of better seeds will have to be intensified. The growing demand for fertilizers will have to be met—and, in this connection, the programme for increasing fertilizer production within the country will have to be speeded up. More attention will also have to be paid to soil conservation, afforestation, use of improved implements and, in general, better methods of farming. It is important at the same time to stress that the task is not merely one of finding adequate financial resources but of mobilising the agricultural community for more production and of channeling to them effectively and on reasonable terms the facilities and services needed for securing increased outputs. Service co-operatives have an important part to play in this connection. The problem is to get the farmer to make the co-operative movement his own. This latter is a task of organisation, and it is this rather than the inadequacy of financial resources which limits the degree of success that can be attained in respect of agricultural plans.

⁵ Report of the Team for the Study of Community Projects and National Extension Service, Vol. III (Part I), 1957, Appendix 18, p. 248.

CHAPTER XX

SURPLUS POPULATION AND RURAL UNEMPLOYMENT

The problem of the surplus population on the land and the consequential growth in rural unemployment and under-employment have been stressed by several competent authorities since the Report of the Famine Commission of 1880. The problem has been accentuated by the increased rate of population growth in recent years. It is obvious that the existence of this surplus man-power in the rural areas acts as a drag on agricultural productivity. The difficulty, however, is that employment opportunities in the other sectors of the economy can be increased relatively slowly, and unplanned movements of the population from the rural to the urban areas carry with them the risk of creating large scale economic and social maladjustments.

The problem of surplus population arose at a certain stage in most European countries. During the nineteenth century population in Europe grew rapidly and, apart from large scale migration, means had to be found for absorbing the surplus in productive occupations. The problem was sought to be solved along four main lines : (i) raising the level of production from land through intensive cultivation, (ii) assisting large scale industrialisation with a view to absorbing the rural surplus, (iii) land reclamation and redistribution of large estates, and (iv) other measures such as consolidation of holdings, spread of the co-operative movement and encouragement of rural industries. Considerable information on this subject is available in the series of monographs prepared for the European Conference on Rural Life (1939) and published by the League of Nations. We in India can, to an extent, draw upon this experience, but it must be emphasised that in several respects the conditions in India are different from those in Europe. Firstly, there are few large landed estates which could be distributed among smaller farmers. Secondly, the scope for

land reclamation and the bringing in of fresh areas under cultivation is fairly limited. Thirdly, the problem is even more complex than it was in Europe in the nineteenth century because of the rigidities of the social system, on the one hand, and the growing expectations, on the other, associated with the spread of democratic ideas. The broad conclusion that one could draw is that the efforts to increase agricultural productivity and to raise rural incomes must be synchronised with the wider programmes for increasing the tempo of development in the rest of the economy.

CHANGES IN OCCUPATIONAL STRUCTURE

Most countries had before the commencement of their 'Industrial Revolution' an occupational structure similar to that in India at the present time. Agriculture and allied activities claimed 46 per cent of the working population in Great Britain in 1811, 63 per cent in France (1827), 42 per cent in Germany (1882), 85 per cent in Japan (1872) and 81 per cent in Russia (1926).

PERCENTAGE OF WORKING POPULATION IN DIFFERENT INDUSTRIES

	Great Britain		France		Germany		Japan		U.S.S.R.	
	1811	1901	1827	1901	1882	1907	1872	1912	1926	1939
1. Agriculture, Forestry, Fisheries, etc. . .	46*	9	63	33	42	29	85	62	81	58
2. Mining, Manufacturing and Building . .	NA	47	NA	42	39	45	5	18	6	17
3. Trade and Services . .	NA	44	NA	25	19	26	10	20	13	25

Source: Colin Clark: *Conditions of Economic Progress*, Macmillan & Co., London, 1951, Second Edition, Chapter IX.

* Includes 'mining'. By 1811, industrial revolution in Great Britain had already got under way, but there is evidence to believe that the proportion of labour force in the primary sector in 1688 was not very different (*Vide* Colin Clark: *Ibid.*, p. 407).

N.A. = Not available.

As the table shows, the process of industrial development in these countries altered their occupational pattern substantially. By the turn of the 19th century, Great Britain, France and Germany had the bulk of their labour force occupied outside agriculture. Over a period of forty years of rapid economic growth, the proportion of working force in agriculture declined in Japan by 23 points. A similar decline occurred in Russia during the inter-war years.

In other words, in highly industrialised economies a small proportion of the labour force is engaged on agriculture and is yet able to supply a significant proportion of the food and raw materials needed. It is undoubtedly true that some of these countries have been able to sustain this type of occupational pattern by availing themselves of the advantages of international trade which makes it possible for them to obtain the food and raw materials they need by selling abroad the products of their industries. It must be noted, however, that a country like the United States is able with only 12 per cent of its labour force devoted to agriculture to produce sufficient food not only for its own needs but also to provide large quantities for export. The point is that if a country has to use up some 70 per cent of its total population for producing the bare wherewithals of existence, it cannot secure by utilising the balance of its labour force the variety of goods and services needed for sustaining a high standard of life. What is essential, therefore, is to secure larger outputs from agriculture with the same or possibly a smaller proportion of the population working on the land. This requires, obviously, a great improvement in the availability of tools and implements per person employed in agriculture—along with the adoption of new methods of farming and land management.

Changes in occupational structure necessarily takes a long time to materialise and it is to be expected that it will take several decades for the occupational pattern in India to become more balanced. The occupational distribution of the labour force in India in 1955-56 was roughly as follows :

OCCUPATIONAL PATTERN IN INDIA: 1955-56¹

	Number (in million)	Percentage
1. Agriculture and allied pursuits	110.0	72.4
2. Mining and Factory Establishments	4.0	2.6
3. Small Enterprises	12.0	8.0
4. Communications, Railways, Banks and Insurance	1.6	1.0
5. Other Commerce and Transport	10.0	6.7
6. Government Administration, Professions and Liberal Arts and the rest	14.8	9.3
Total	153.4	100.0

¹ Papers relating to the Formulation of the Second Five-Year Plan, Planning Commission, Government of India, 1955, p. 269.

Since a very high proportion of population is dependent on agriculture, it is not easy to expand non-agricultural employment fast enough to cope with the increase in population and also to reduce the surplus in agriculture. In 1955-56, 72 per cent of the labour force was dependent on agriculture, all the other occupations accounting for the remaining 28 per cent. We may assume that the proportion now is as 70:30. The rate of increase in the labour force is now about 1.5 per cent. If this increase in the labour force is to be absorbed in the non-agricultural occupations—if, in other words, the aim was to prevent any increase in the absolute numbers subsisting on agriculture—non-agricultural employment would have to expand at a rate of 5 per cent per annum ($1.5 \times 100/30$). This however is a target that cannot be achieved in the short-run and there will be no escape for several years to come from further increases in the numbers dependent on agriculture.

According to the population projections that have recently been worked out, the total population in 1976 is expected to be 568 million. Assuming that a balanced occupational pattern for India would mean about 60 per cent of the population subsisting on the land, about 20 per cent dependent on industry and mining and some 20 per cent on tertiary occupations, the total population dependent on land by 1976 would be 340 million; and that dependent on the other two categories would be 228 million, equally divided between the two. Thus, non-agricultural occupations will have to provide for over 100 million additional persons in the next 15 years, *i.e.*, at the average rate of nearly 7 million persons per annum, whereas the additional employment opportunities outside agriculture created during the whole of the Second Plan period are estimated at 6.5 million and the target for the Third Plan is reported to be around 11 million. These calculations are meant to be only illustrative but they bring out quite clearly how large the expansion of employment opportunities in sectors other than agriculture has to be in order that the surplus manpower on the land is siphoned off.

APPROACH OF THE FIRST TWO PLANS

The problem of surplus man-power and rural employment was discussed in both the First and the Second Plan Reports. The

First Plan referred to the two aspects of the problem in relation to economic development: (a) the necessity of utilising to the full the idle man-power for promoting development and (b) increasing the productivity of labour in order to ensure that increase in employment is accompanied by an increase in real income. It was also emphasised that the two are inter-dependent. Utilisation of idle man-power for building up productive assets without impairing the stability of the economy requires as a pre-condition an increase in the productivity of labour and/or availability of larger supplies of essential consumer goods like foodgrain on which the bulk of the increase in money incomes tends to be spent. The Plan also took the view that unemployment was not merely an economic problem but it was a social problem involving human values and had to be approached from a broader point of view. It is suggested that the following criteria ought to be kept in mind in framing the employment policy for development.²

- (a) maximum use of unemployed man-power for development purposes ;
- (b) a check, in the initial stages, on the increase in money incomes ;
- (c) raising the level of investment and technical efficiency so as to improve labour productivity ;
- (d) guarding against technological unemployment in the early stages of industrialisation; and
- (e) balancing the allocation of investment between different lines in such a way as to provide larger employment opportunities and at the same time ensuring that the long-term pattern of development was not jeopardised.

In accordance with these criteria the Plan emphasised the development of small-scale and cottage industries to absorb a large proportion of increase in working population. It was also envisaged that within the sphere of agriculture itself programmes of irrigation, land reclamation, extension of mixed farming and the like would provide increased employment or reduce under-

² Report on the First Five-Year Plan, p. 25.

employment. Over a longer period, the expansion of the tertiary sector was expected to absorb a considerable part of the additions to the working force. The Report said : "In the immediate future attention has to be concentrated primarily on diverting the increases in working population to large and small-scale industries and the supporting services rather than on changing in any drastic way the overall occupational pattern. The change in occupational pattern will, no doubt, follow—perhaps faster than can be foreseen now—but this is not an end itself and should be regarded more as a corollary of development rather than as a direct objective."³ The Second Plan Report followed basically the approach to problem of unemployment outlined in the First Plan. But it took a somewhat more positive attitude towards changes in occupational structure. To quote : "The objective of policy from the long-term point of view should clearly be to keep to the minimum further increases in the working force in agriculture. In fact, after a period, there should be a fall even in absolute numbers on the land."⁴ It, however, stated, that even with the best effort, some increases in the working force in agriculture would be unavoidable for some years to come. The utmost one could aim at would be to reduce the proportion of the agricultural labour force to the total to about 60 per cent by 1975-76.

The progress of the various programmes of development in the fields of agriculture and rural industries over the last ten years has been reviewed in the earlier chapters. The extent to which these programmes have created additional employment opportunities cannot be measured with any degree of precision. According to the estimates of the Planning Commission, there was at the beginning of the Second Plan a backlog of unemployment of 2.5 million persons in the urban areas and 2.8 million persons in the rural areas. The extent of under-employed in the rural areas has been placed at around 30 per cent. The Second Plan envisaged an addition of 10 million to the labour force—3.8 million in urban areas and 6.2 million in rural areas.⁵ The programmes of development in the Second Plan were expected to provide employment outside agriculture to 8 million persons⁶ and it was also

³ *Op. cit.*, p. 26.

⁴ Report on the Second Five-Year Plan, p. 14.

⁵ *Ibid.*, p. 112.

⁶ *Ibid.*, p. 115.

expected that with the increase in agricultural production there would be reduction in under-employment in that sector. Altogether the Plan envisaged a sufficient increase in the demand for labour to match the increase in the labour force amounting to 10 million. The actual outturn is now expected to be a little less than these initial expectations. This is partly a result of the fact that with the rise in prices the financial outlay on the Plan is likely to mean considerably less in real terms. Additional employment opportunities outside agriculture generated in the Second Plan would be of the order of 6.5 million. Thus the "backlog" of unemployment would have increased over the period of the Plan. This is not to suggest that one could identify and locate this "backlog." It would be misleading to infer that a certain proportion of the people in rural areas have absolutely no work and that the number of such people is increasing. In an under-developed economy unemployment takes the form of under-employment and of low incomes. In other words, the available quantum of work gets redistributed among a larger labour force—to the detriment both of the existing employed as well as the new entrants. The concept of "backlog" means in effect that the rate of growth of *per capita* incomes in agriculture is kept down by the pressure of the surplus that has not been absorbed elsewhere.

THE THIRD PLAN

The experience of the two Plans in the matter of providing employment opportunities in and outside agriculture shows that despite a significant increase in the level of investment in the economy and a rise in industrial and agricultural production, the problem of unemployment has hardly become less acute. The task in the Third Plan is, therefore, by no means an easy one. At the present rate of increase, there would be an addition of some 15 million to the working force during the Third Plan period. This is apart from the "backlog" of unemployment at the end of the Second Plan which may be notionally expressed as "7 to 8 million." On the estimates available, during the Third Plan period employment opportunities will be found for some 11 million persons outside agriculture. Thus some of the new entrants to the working force will have to be found employment in agriculture itself.

INTENSIVE AGRICULTURE

The aim in the Third Plan is to increase agricultural production by some 35 per cent. This will involve adoption of improved techniques, utilisation of better seeds, greater use of fertilizers, measures for the conservation of soil and above all extension of irrigation. All these will mean more work on the land; contour-bunding, digging of field channels and the like will provide temporary employment in construction, whereas improvement in techniques of ploughing, adoption of the Japanese method on a larger scale and, in general, intensive farming would involve a permanent increase in work. No doubt a part of this increase in demand for labour complementary to the various inputs in agriculture will be met by a reduction in under-employment; but a part also will be met by new employment opportunities. The division between these two forms of meeting a larger demand for labour will depend on a number of factors such as the size of holdings, the extent to which family labour contributes to the work of the farm and other organisational changes in agriculture. The point to note is that measures of increasing agricultural production will have the effect of providing additional employment to some extent and increasing productivity and incomes per head.

RURAL INDUSTRIES

Agricultural operations can, however, provide only a limited scope for larger employment. In the long run, the solution to the problem of unemployment is to be found in the diversification of the rural economy, improving the technical and economic position of the existing handicrafts, encouragement of new rural industries and establishment of small-scale industries in small towns where employment opportunities for the rural surplus of manpower can be provided. The prescription in favour of small industries should not be implied to mean fostering of uneconomic techniques. Creation of employment would be a comparatively easy task if no regard was to be paid to the level of production. The purpose of larger employment is, in the last analysis, to raise the incomes of people and unless additional employment is productive, little will be gained in terms of either the material welfare of the newly employed or contribution to the community's effort at development. Fortunately, not all small-scale industries are

necessarily uneconomic. Modern industrial processes leave sufficient room for small units to take over production of components and parts which are required for the manufacture of products of the large scale industries and which cannot be profitably produced on a large scale. There are also consumer goods which are capable of being produced in small units. A deliberate policy of encouragement of cottage industries would seek to orient consumer preference in favour of handicrafts so as to make these industries economically viable. The point is that the question of choice of techniques of production arises only in a limited number of cases; and in such cases one has to take a balanced view among the conflicting considerations of larger employment and greater efficiency.

INDUSTRIAL ESTATES

There is a considerable scope even now for the spread of small-scale industries in lines where the question of choice of techniques does not arise. In order to make small industries viable some initial assistance by Government becomes necessary. Industrial estates which provide accommodation, power, transport arrangements for smooth flow of raw materials and similar other facilities have proved to be quite helpful to small industries. Out of the 94 such estates suggested to be constructed during the Second Plan period, 34 have already started functioning and 400 units have gone into production in these estates.⁷ An advantage of industrial estates is that if they are located away from larger urban centres they would help discourage the migration of population to such centres thus preventing congestion in towns and cities. On the other hand, the scope for extending the industrial estate scheme to rural areas is not unlimited. One of the prime requisites for the success of industrial estates is provision of adequate power. Rural electrification schemes, as and when they materialise, will be of help. But the cost of such schemes is so high as to prevent any rapid advance in the direction of electrification of the villages. The Second Plan Report stated that the average cost of providing distribution lines and sub-station equipments would be Rs. 60,000 to Rs. 70,000 per village; if all the villages in the country were to be electrified, the capital outlay involved

⁷ Report of the Working Group on Small-Scale Industries, Programme of Work for the Third Five-Year Plan, Government of India, 1959, p. 30.

for distribution lines alone would exceed Rs. 3,000 crores.⁸ The operation and maintenance costs tend also to be high because of the low load factor. Thus, the best course in the immediate future would be construction of estates in small towns where electrification is not so expensive and which could attract labour from the rural areas.

REGIONAL DEVELOPMENT AND MOBILITY OF LABOUR

The problem of unemployment is made more acute by the various social and economic barriers to the mobility of labour as between different regions. There are also difficulties in large scale transfers of population from the rural to the urban areas. The idea has, therefore, gained ground—and rightly—that every attempt should be made to bring work to the people rather than to move people where work is available. Actually, both these processes are necessary. Development of small industries, rural electrification and establishment of industrial estates aim at bringing work to the people. This is also the basis of the idea that various projects of development ought to be located in different parts of the country with a view to spread the benefits over as large an area as possible. Location of industries is governed by numerous conditions, the chief among which are availability of raw materials and power and the nearness to consuming centres. From a strictly economic point of view, one would choose the location that is most economical in terms of cost. But in a planned economy, this cannot be the sole criterion of location of industries. Development of depressed areas and backward regions has to be given a certain priority and from this point of view dispersal of both large and small industries is justified. The idea of regional development, however, has also its own limitations. The development of the country has to be viewed as a whole and, if regional considerations are given too much weight in the early stages of development, there is danger of wasteful use of scarce resources leading to a retardation of the growth of the economy. These considerations suggest that simultaneously with development of non-agricultural occupations in the rural areas, it is necessary also to adopt measures that promote inter-regional or geographical mobility of labour. It is important for development purposes

⁸ 8 Report on the Second Five-Year Plan, p. 340.

to treat the country as one unit and to foster the national rather than a sectarian or parochial approach to problems of economic and social adaptation.

In the last analysis, the problem of rural unemployment is the problem of under-development of the economy itself. It is only when the basic social overheads such as power, transport and communications as also education and training in skills are provided so as to reach as large a proportion of population as possible that one could expect spontaneous growth of small trades and occupations linking the organised sector of the economy with the vast diffused sector of agriculture. These are, however, relatively long-term solutions. They pose a challenge to the community which has to be met, among other things, by a progressive stepping up in the rate of investment in the economy. In fact the existence of surplus man-power itself could be made use of in increasing investment and providing productive employment in the immediate future.

"DISGUISED" SAVINGS

Prof. Ragnar Nurkse has propounded the thesis that surplus man-power represents a disguised potential of savings.⁹ Since the unemployed population in rural areas is maintained by the family or the local community, it follows that if this man-power was used for productive purposes there would not be a very large addition to the demand for consumer goods. Whatever the unemployed are consuming today represents the saving potential which can be put to use for productive investment. Of course, with the employment of the previously unemployed, there would be some increase in the demand for consumer goods; there will also be need for complementary factors of production such as building materials, supervisory and skilled personnel and some tools and equipment. But if these complementary factors and the additional consumer goods required can be found, they would make it possible to raise the level of investment by an amount larger than their value, the difference representing the labour of the surplus man-power.

⁹ Problems of Capital Formation in Under-developed Countries, Basil Blackwell, Oxford, 1953, Chapter II—"Population and Capital Supply."

The thesis advanced by Prof. Nurkse contains an essential truth, *viz.*, that capital formation is, in the last analysis, stored up labour. To the extent that there is idle man-power in the rural areas, therefore, there is a potential available for increasing the rate of investment. There are, however, several limitations to the practical application of this idea. In the first place, additional employment would generate additional incomes which is likely to be spent on food and consumer goods. Therefore, the creation of employment opportunities is itself a function of the rate at which productivity of the wage goods sector can be increased. We, therefore, come back to what was stated earlier, *viz.*, that the increase in agricultural production is a pre-condition for stepping up the rate of investment. Prof. Nurkse's analysis ignores also the social aspect of the problem of unemployment. The idle man in the rural family is either not wholly idle or is not willing to accept wage employment without sufficient inducement. In effect, although he may be living on the bare subsistence standard, he will have to be paid the market rate of wage if he was to be drawn into employment. Moreover, the problem is not so much that of unemployment as of under-employment. During seasonal peaks, there develops, in fact, a shortage of labour in many parts of the country. Thus, utilisation of idle man-power in rural areas requires not merely complementary investment but also selection of such projects as can conveniently be put through during the off-seasons. Projects which require a longer gestation have necessarily to be ruled out.

Another practical limitation of Prof. Nurkse's thesis is that disguised unemployment reflects in fact the poor organisation of agriculture. This means that so long as the existing state of techniques and organisation persist, there may not be any 'surplus' which can be released for productive work elsewhere. The 'surplus' has in fact to be set free by improving farm techniques and, even more, organisation of agriculture which includes reform of the land system as well as management of the farms.

UTILISATION OF MAN-POWER

It is these limitations which have so far prevented any spectacular advance in this country in the direction of using the surplus man-power for construction of community assets like roads, schools,

hospitals and the like. While it is not easy to evaluate the progress made so far, some estimates are available from the enquiries made by the Programme Evaluation Organisation. Nearly 73 per cent of the 399 villages studied reported *Shramdan* and in 83 per cent of the reporting villages free labour was given by all communities.¹⁰ The value of peoples' contribution in terms of cash, kind and labour amounted to Rs. 25.1 crores during the First Plan period and was Rs. 49.4 crores during the first three years of the Second Plan.¹¹

The utilisation of man-power for investment has been carried out with some degree of success in China. By the end of 1958 nearly 120 million peasant families or 99 per cent of the total were organised into communes each with an average membership of about 5,000 households.¹² The communes have been able to organise man-power on a much bigger scale than the former co-operatives for projects of water conservancy and provide unified management, leadership and initiative. During the off-season, campaigns for land development have been carried out leading to a large scale extension of irrigation facilities. The communes have also helped to rationalise the use of labour and bring women into the labour force. It may be mentioned, however, that there have been reports of inflation and shortage of essential consumer goods — a demonstration of one of the limitations of the utilisation of idle man-power discussed above. An even more fundamental consideration from the point of view of a country like India is that a democratic system cannot use force. China's political system is different; there is no parliamentary democracy and the ruling party has an all-pervading organisation which controls every aspect of economic life. But, the Chinese experiment shows that rapid economic development (and the social changes which have necessarily to accompany it) cannot take place unless the entire community is aroused to enthusiastic action. The use of force to mobilise people's participation is objectionable. But, this only highlights the need to stimulate local initiative and leadership. A democracy has to find its own ways of securing rapid progress, and the task is to find the appropriate organisation for this purpose.

¹⁰ The Fifth Evaluation Report on the Working of the Community Development and N.E.S. Blocks, P.E.O., Government of India, 1958, pp. 171-172.

¹¹ Report of the Ministry of Community Development and Co-operation, 1959-60, Department of Community Development, Government of India, p. 34.

¹² The State of Food and Agriculture, 1959, F. A. O. Rome, p. 58.

This is now generally recognised. The local development works have served so far an educative purpose; if they are to provide employment on a substantial scale it would be necessary to select the projects properly, make provision for the complementary investments in the plans of the States and the districts and entrust the village level organisation with the task of implementing them. The type of projects which would be suitable for utilising under-employed labour for development purposes are: (i) irrigation and flood control projects, land reclamation schemes, including water-logging and drainage and the reclamation of saline lands, afforestation and soil conservation schemes, construction of roads, etc.; (ii) construction and maintenance of bunds and field channels for all irrigation works, contour-bunding and terracing, (iii) land levelling, surface drainage, (iv) new minor irrigation works, construction and repair of wells and tanks, provision of drinking water supply, school buildings, etc., (v) other programmes for dry-farming in dry areas, (vi) construction of approach roads linking villages and of village godowns for better storage and preservation of food and (vii) consolidation of holdings.¹³

In regard to programmes such as construction and maintenance of field channels, contour-bunding and soil conservation, there should be general acceptance on the part of every local community of responsibility for enforcing old customary obligations. These obligations should, if necessary, be backed by legal sanction and the panchayats, in collaboration with the co-operatives, should have power to see that these obligations are enforced.

In addition to these individual efforts, community spare time work on capital formation can be of considerable value. The villagers, for example, can build their own roads, schools or wells, fisheries, common pastures, and can do much afforestation or soil conservation work for themselves. Such work needs to be organised by community leaders with financial help from the Government. "This work is valuable not only because it creates capital without reducing consumption but also because it is a means of awakening the interest of what are sometimes rather stagnant

¹³ For a detailed account of works projects see Facets of Planning, Publications Division, Ministry of Information and Broadcasting, Government of India, 1960, pp. 27-40.

communities.”¹⁴ Special works projects should also be organised by local authorities and State Governments in areas where the incidence of unemployment is high, and wages may be paid at village rates. In rural areas which have heavy pressure of population, pilot projects may also be drawn up for carrying out works programmes to utilise the idle rural man-power. In areas where natural calamities such as floods, water-logging, drainage, etc., occur, the community development organisation should enlist the co-operation of villages to deal with such emergencies. In a developing economy, any peaceful means of arousing the enthusiasm of the masses of the people and of stimulating them to want further improvement should be strongly supported. The village Co-operative, the Village Panchayat and the School can play an important role in the mobilisation of surplus man-power in the rural areas.

FAMILY PLANNING

While on the subject of surplus man-power and the ways and means of utilising it, we should like to mention the need for control of population growth. Although man's capacity for getting more out of the resources provided by nature has increased a great deal—and will increase further, there is no escape from the fact that an old and already thickly populated country cannot support an ever-increasing population. In the industrially advanced countries, voluntary limitation of families came into vogue as the average man's standard of life rose and he began to see the advantages of maintaining this standard. There is, on historical evidence, a certain inverse relationship—at least at a certain stage of development—between increase in incomes and in numbers. But, for countries seeking rapid development, adoption of family planning and limitation of numbers is an essential condition for securing a significant rise in living standards. It used to be said that the Indian farmer—or, in fact, the average Indian—would be averse to family planning. But, such enquiries as have been made on the acceptability of birth control techniques show that the psychological or sociological resistance to these techniques is far weaker than some social reformers were prepared to believe. In the conditions prevailing in India today, a spurt in population

¹⁴ Measures for the Economic Development of Under-developed Countries, United Nations, 1951, p. 40.

growth is certain to slow down the rate of economic advance. If the discoveries of science are to be used for increasing production, there is no reason why they cannot or should not be used for limiting population growth.

To sum up: a change in the occupational structure of the economy such that permanent employment is provided to those who are redundant in agriculture can come about only over a period of years. Absorption of the surplus man-power in non-agricultural employment cannot but be a gradual process. Basically, it is a question of stepping up the rate of investment and hence the rate of growth of the economy as a whole. Meanwhile temporary employment can be provided on a 'revolving' basis in local development works of the kind which are labour-intensive, provided the supplies of foodgrains, clothing and other articles of essential consumption can be augmented rapidly. The object of our plans should be to secure as far as the resources permit a balanced expansion in respect of both the revolving and the permanent type of employment opportunities.

CHAPTER XXI

PROBLEMS IN IMPLEMENTATION

It remains, in this final chapter, to stress the problems in the implementation of accepted policies in the field of rural reconstruction and to highlight in this context the role of the various agencies and institutions, which must operate effectively on the ground.

Three steps are involved in any major organisational effort such as is required in order to lift the rural economy from its ruts. Firstly, the nature of the problem must be adequately understood and appreciated. Secondly, an appropriate long-term and stable policy for dealing with the different aspects of the problem in a co-ordinated way has to be worked out. Thirdly, efficient agencies and institutions for the implementation of this policy and the programmes following from it must be set up — or, if they exist, strengthened. Over the last 25 years or so considerable work has been done by way of analysis or diagnosis of the Indian rural problem. In regard to the enunciation of policies also there has been, especially since Independence, considerable progress. The broad lines of policy on questions like land reforms, co-operative credit and marketing, provision of the necessary supplies and services, development of irrigation, roads, etc., have been formulated and accepted. The successive five-year plans aim at translating this accepted policy into concrete programmes for agricultural and allied development in the rural sector. The most important problem at this stage is whether and how far the administrative system is geared effectively to the tasks of development and to what extent the agencies for development, whether official or non-official, are in a position to carry through the tasks assigned to them.

SHORTCOMINGS

The experience of the First and Second Plans shows that in various spheres of development, while the programmes were on the whole well-conceived and carefully prepared, the results

did not come up to the mark. Agricultural production has increased by some 30 per cent over the last 10 years, but the plan for agricultural development has not yet reached every village — ~~rough~~ less every farmer. A considerable part of the increase in production during the First Plan was on account of favourable monsoons, and the additions to the production potential were below the targets envisaged. In some cases, while the production potential was technically available, it was not actually utilised. For instance, in irrigation, as against the additional potential of 6 million acres created during the First Plan, actual utilisation was about 4·5 million acres. The completion of the major and medium irrigation works did not synchronise with the construction of field channels, land development and the spread of technical information relating to the manner in which the new sources of water could be used to the best advantage. The shortfalls occurring in plan outlays as compared to the targets also indicate that the administrative machinery has not been able to cope with the scale and complexity of the problems of implementation. Above all, considerable confusion has occurred because of the failure to implement land reform legislation effectively. On this aspect, in fact, there has even been lack of clarity — or vacillation — regarding the policy to be pursued.

An enquiry into the working of the Bombay Tenancy Act of 1948 in certain districts of Bombay showed that by 1952-53 only 60 per cent of the tenant-cultivated area in the districts covered by the enquiry was in the hands of original tenants: nearly 25 per cent of the area was resumed by the owners and another 15 per cent had changed tenancies.¹ The operation of the Act was forestalled by resumption of self-cultivation. With regard to rents, the system of half crop-share which was prevalent in nearly 50 per cent of the area still continued.² The level of rents in all districts of Gujarat except two was in excess of the legal ceiling (one-sixth of gross produce) in 1952-53.³ In Baroda, 45 per cent of tenants

1 V. M. Dandekar and G. J. Khudanpur: Working of Bombay Tenancy Act, 1948 — Report of Investigation, Gokhale Institute of Politics and Economics, Poona, 1957, p. 109.

2 *Ibid.*, p. 128.

3 M. B. Desai: Report on an Enquiry into the Working of the Bombay Tenancy and Agricultural Lands Act, 1948 (as amended upto 1953) in Gujarat (excluding Baroda District), Indian Society of Agricultural Economics, Bombay, 1958, pp. 78-80.

continued to pay fixed crop-share rents⁴ and only in 32 per cent of the cases studied rent was reported to be within the legally prescribed maximum.⁵ The situation in other States was also similar.⁶ The point is that delays in implementation of land reforms have prevented the intended benefits for the tenants from accruing. It is true that the agrarian structure cannot be changed merely by legislation; the small farmers and tenants need positive assistance, financial and other, to be able to improve their economic and social status. But, a stage is being rapidly reached when attention needs to be focussed on concrete achievements in the field of agricultural production and rural reconstruction rather than on precepts and policies. The most important element in successful planning is, of course, implementation; and it is here that what the political sciences call the State and the Community must merge together.

THE ROLE OF THE STATE

Until Independence, the problem was to get the Government to take sufficient and active interest in the field of rural development. It will be recalled that as late as 1943 the then Finance Member, Sir Jeremy Raisman, announced with a great deal of self-congratulation the setting apart of "a round sum of Rs. 50 lakhs" for helping agricultural development.⁷ After Independence, the problem of Indian agriculture has been recognised as the crux of economic development. Indeed, one could say that the danger rather is that the initiative and responsibility being taken by Government are, to an extent, affecting adversely the willingness of the local people to take their share of responsibility. The stress laid by thinkers like Vinobaji on "*Loka-Shakti*" rather than on "*Shasana-Shakti*" is not merely the expression of a philosophical ideal; it represents a sound practical approach.

4 V. Y. Kolhatkar: An Enquiry into the Effects of the Working of the Tenancy Legislation in the Baroda District of Bombay State, M. S. University of Baroda, Baroda, 1958, p. 31.

5 *Ibid.*, p. 50.

6 *Vide* A. M. Khusro: Economic and Social Aspects of Jagirdari Abolition and Land Reforms in Hyderabad, Osmania University Press, Hyderabad, 1958, pp. 48 and 172-173; and Reports of the Committees of the Panel on Land Reforms, Planning Commission, Government of India, Delhi, 1959, p. 36.

7 Budget Speech, 1943-44.

For bringing about the economic transformation that we have in view, the State is the most important single agency. It undertakes certain direct investments. It also creates conditions in which the agriculturist can increase and improve upon his production effort. The State also seeks to bring about certain structural changes in the rural economy through land reforms, by substitution of private credit by institutional credit and through other measures. These are large tasks and the success that can be achieved in carrying them through depends (a) upon how well the essential purposes of State policy and State action are reflected in the operation of the administrative machinery which is in contact with the people, and (b) upon how actively the village community is being drawn into this development effort. This latter is a problem not merely of administration but of organisation in a wider sense. State action is of vital significance, but it is never a substitute for the people's initiative and organisation.

There is, of course, no gainsaying the fact that the Indian administrative system has shown remarkable resilience and adaptability in the face of difficult situations since Independence. What has been achieved is praise-worthy, considering that in some of the Princely States, the administration was far from well-organised. Nevertheless, there has been a certain deterioration in standards of efficiency and integrity. To the millions of people in the countryside the State or the Directive Principles of the Constitution are only abstractions. What they see and what they like or dislike is the actual administrative machinery which functions at points that are closest to their daily life. It is hardly necessary to emphasise the fact that however excellent overall policies and plans might be, they cannot bring in the expected results if their implementation is weak.

ADMINISTRATIVE REFORM IN THE PLANS

The role of administration in carrying out the programmes of development was stressed in the First Five-Year Plan which dealt with three groups of problems of administrative reform:³

3 Report on the First Five-Year Plan, p. 113.

- (i) problems bearing on the entire field of public administration such as the achievement of high levels of integrity, efficiency and economy;
- (ii) problems bearing on the administration of development programmes at the district level; and
- (iii) problems relating to regional co-ordination and supervision of district development programmes and the place of social service agencies in the reconstruction of rural life.

With regard to (i), the Plan suggested that in order to minimise the possibilities for corruption or reduce the scope for it, there should be clearly-stated rules or principles to deal with individual claims or requests, delay should be avoided, the choice of officials should be made with special care and means should be devised to reward the efficient and punish the dishonest. The efficiency of administration in dealing with economic problems could be improved by drawing into public service individuals with high academic qualifications or special experience in the economic field, — from the universities, banks, financial institutions and industry — recruitment of persons at junior levels and making arrangements for training them for specific tasks, the constitution of special cadres such as for industrial management, and supplementary recruitment for land reforms, food administration and the like. Methods of work, it was suggested, should be put on a sound footing and adequate arrangements made for supervision and inspection. Another suggestion made was that the system of financial control also should be adapted to the needs of development programmes and the existing arrangements for assessing the work of officials suitably revised so as to create, through prospects of promotion, an incentive to better work. In the field of development programmes, the Plan recommended that a proper system of assessment of results had to be evolved.

As regards (ii) and (iii), the Plan recommended that the reorganisation of the district administration should provide for:

- (1) strengthening and improvement of the machinery of general administration;

- (2) establishment of an appropriate agency for development at the village level which would derive its authority from the village community;
- (3) integration of activities of various development departments in the district and the provision of a common extension organisation;
- (4) linking up of local self-governing institutions with the administrative agencies of the State Government in relation to all development work; and
- (5) regional co-ordination and supervision of district developmental programmes.⁹

The Plan stressed the role of local bodies and voluntary official institutions in the implementation of development programmes. It would be necessary to make suitable arrangements for linking such local self-governing bodies at different levels with one another, *e.g.*, village panchayats with district or sub-divisional Local Boards. The programmes undertaken by local bodies, it was stressed, should be integrated with State programmes so that the former may not be restricted to the resources locally available. District plans should form part of regional plans, the 'regions' being determined by physical, economic and administrative considerations. The Plan also emphasised the need for co-ordination of official and non-official effort and urged that non-official organisations should help in reaching the plans to the people and ensuring public participation.

In the course of the First Plan, the administrative system was strengthened in several respects. The setting-up of the National Extension Service for agriculture and the programme of community development called for considerable reorientation of the administrators' outlook and for a great deal more of co-ordinated work on the part of departments. The Second Plan re-emphasised the problems of administrative reform and stressed in particular the importance of comprehensive village planning

⁹ *Op. cit.*, p. 130.

which would take into account the needs of the entire community, including the weaker section. In this connection, the Plan recommended revitalisation of the village panchayats and their integration with the reorganised district development machinery.

DISTRICT ADMINISTRATION

The question of developmental administration was reviewed by the Balwantray Mehta Committee in 1957. The report of the Committee made far-reaching suggestions.¹⁰ We have referred in an earlier chapter to the conclusions and recommendations of this Committee. The basic idea stressed by the Committee is that there is need for democratic decentralisation and in particular for integration of the community development and N. E. S. block staff with the normal staff of the various development departments. The existing system of agricultural administration was examined recently by another Committee appointed by the Government of India.¹¹ It found that the agricultural departments had suffered from lack of able personnel because of low scales of pay, existence of temporary posts and insufficient attractiveness of the agricultural services as compared to other services. District administration is faced with the task of improving the quality of its personnel. There is at present inadequate focussing of executive authority and responsibility in the district.

The district is still the most important single unit of administration with the district officer, that is, the Collector, as the government's principal representative in touch with the people. Besides being in control of the administration of law and order and revenue in the district, the Collector holds a co-ordinating responsibility for the activities of all departmental agencies within the district. In the hierarchy of administration, he enjoys status and powers which give him considerable influence over the local people. As a matter of fact, nothing can happen in the district without the Collector's knowledge or approval. He is the executive arm of the State and friend, guide and philosopher to the people in his jurisdiction. However, a study of district

10 Committee on Plan Projects: Report of the Team for the Study of Community Projects and National Extension Service, Volume I, 1957.

11 Report of the Agricultural Administration Committee (Nalagarh Committee) Ministry of Food and Agriculture, Government of India, Delhi, October, 1958, p.3.

revenue administration¹² revealed that the requisite sense of urgency on the part of the officials in the implementation of new development programmes was lacking. Nor have they shown any intelligent interest in the development of the area and the study of its varied problems. The increasing centralisation of functions in the administrative machinery has tended to thwart the initiative of capable and able officials. This trend should be checked. There have been delays also in the disposal of cases or applications as a result of excessive concentration of functions or authority, insufficient staff, poor quality of personnel, lack of clear directions, etc.

It is also observed that the district revenue administration has been over-burdened with multifarious duties arising out of expanding functions of a Welfare State. As a result the Collector as the head of the administration is considerably over-burdened. It is necessary to relieve him of the routine functions; and he should have sufficient freedom and leisure to acquaint himself thoroughly with all the problems of the district and their possible solution. This means that he should be given assistance. As a principal functionary of the State, the Collector carries heavy responsibility. It is on his capacity as an administrator that the success of most of the development activities of the State would largely depend. People in the area look up to him for guidance and advice. Therefore, it is essential for the higher authorities to maintain his position and prestige. It is satisfactory to note that in the Bombay State, the revival of the post of Divisional Commissioners has provided the administration in the district with close supervision, control and guidance of a nearby appellate authority in revenue matters. The difficulties facing the administrative machinery in changing itself to adjust to new conditions and requirements are great and the presence of a senior experienced officer nearby is of considerable benefit to the district administration.¹³ In respect of special reform measures such as land tenure, land settlement, famine, etc., there should be separate staff for dealing with such matters. These duties should not be allowed to overshadow the positive tasks of development in the rural areas.

12 N. B. Desai: Report on the Administrative Survey of the Surat District, Indian Society of Agricultural Economics, Bombay, 1958, pp. 157-163.

13 *Ibid.*, Preface by Manilal B. Nanavati, p. ii.

Organisationally, the same unity of purpose and direction should be secured at the block or taluka level by the block development officer or mamlatdar. The problem of co-ordination extends down to the village where the ancient *patwari* has very deep roots and has important functions to perform which affect the life of the villagers intimately. Gradually, more and more administrative and beneficent duties are being discharged by the village level workers. In some areas, a certain amount of mutual uneasiness is noticed between them and the revenue staff. In Bombay, *e.g.*, definite attempts are being made to integrate the revenue and general administration with the development staff in project areas. Such co-ordination between the administrative and developmental staffs is a vital need everywhere.

Thus the administrative system has provided a hierarchy of agencies from the district headquarters to the smallest village with varying degrees of administrative control and supervision. Along with this, there are local self-governing institutions, created to deal with problems of sanitation, medical relief, construction of roads, etc., with funds provided by Government through imposition of local cesses or assignments of certain revenue. Government have also set up special development agencies which are advisory in character to help the people socially and economically.

With the acceptance of a Welfare State as the objective, the main administrative agency must work efficiently and be actively responsive to the new policy. At the same time, the Community Development and the National Extension Services should be equally efficient if they want to enlist the co-operation of the local people in the adoption of reform measures recommended to them. There is considerable complaint as can be seen from the Evaluation Reports that the country does not yet get results, commensurate with the men and money employed, specially in the creation of proper village agencies and in getting the people's co-operation in the implementation of the reforms accepted.

CO-ORDINATION WITH LOCAL INSTITUTIONS

It is at this point that the reform of the administrative system and the building up of local self-governing institutions have to be viewed together. The farmer, left to himself, is too

weak, economically and socially, to be able to concern himself with either land development or use of better seeds, chemical fertilizers and the like. He has to be assisted through several local agencies, the most important being the Panchayat, the co-operative society and the school. The Panchayat can provide the social and economic overheads — roads, communications, schools and the like — and look after local administration. It has a part to play also in the mobilisation of resources, especially man-power resources for local development works. The co-operative movement should take care of the credit, marketing and production requirements of the village. The new institutions can work well only on the basis of enlightened participation in them by the village population. The village school should become a key institution not only for the education of children, but for social education in the broad sense and for the cultural activities of the village. We discuss in some detail the role of these three basic institutions — the Panchayat, the Co-operative and the School — in the following paragraphs.

RURAL DEVELOPMENT AGENCIES

THE PANCHAYAT

We have dealt, in an earlier chapter, with the decay of corporate life and institutions in the villages as a result of several forces which affected village life after the advent of the British and the introduction of a competitive cash-nexus economy. The recent attempts by the Government to revive the Panchayat and the working of the system of Panchayats have also been reviewed in detail. The results obtained so far cannot be said to be encouraging, but the remedy is not to have less of local institutions and of devolution of power and responsibility but to have more of it and on a better organised basis. A revitalisation of the Panchayat offers the best hope of bringing about that change in the outlook of the villager and of evoking the qualities of decision-making and leadership at the local level without which no democracy can function effectively. Under the Constitution, the Government has been enjoined to reorganise village panchayats as an agency for developing the rural economy and social life. As the Report on the Second Five-Year Plan stated: "Rural progress depends entirely on the existence of an active organisation in the village which can bring all the people — including the

weaker sections (like tenant-cultivators, landless workers and the artisans) — into common programmes to be carried out with the assistance of the administration.”¹⁴ This would require democratisation and strengthening of local institutions and training of the rural people for their new responsibilities. Towards this reorganisation, the Report of the Balwantray Mehta Committee has made valuable suggestions. The Committee has recommended the establishment of (a) an elective village Panchayat, (b) an elected self-governing institution called the *Panchayat Samiti* at the block level and (c) a *Zila Parishad* at the district level. The *Panchayat Samiti* would consist of representatives elected by the Panchayats with an elected chairman and the *Zila Parishad* of the presidents of the *Panchayat Samitis*, the local members of Parliament and State legislature and the district level officers with the Collector as the Chairman.¹⁵ The response of the State Governments to these recommendations has not been uniform. States like Rajasthan and Andhra Pradesh have accepted the recommendations and started implementing them; other States seem to be chary of adopting a system involving a set-up that is different from their existing administrative arrangements.

There is little disagreement regarding the role of the Panchayat. It is widely recognised that a representative body with statutory powers should be made responsible for carrying out development functions on a continuing basis. The first step in this direction is the establishment of statutory Panchayats in all villages, grouped suitably where necessary. They will need financial assistance to start with, and several State Governments have adopted the practice of assigning to them a proportion of their land revenue allocations. The aim should be, more and more, to make them self-reliant. This is a difficult process and it can advance only if an efficient organisation is created supporting the primary units.

With the expansion of the coverage of the N. E. S. movement, there is need to integrate the work of village panchayats

14 Report on the Second Five-Year Plan, p. 150.

15 Committee on Plan Projects: Report of the Team for the Study of Community Projects and National Extension Service, Vol. I, 1957, Section 2—“Democratic Decentralisation.”

with the programmes adopted in development blocks. Panchayats have two sets of programmes: (a) those that are sponsored by the Government through extension workers and by district boards through their agencies; and (b) those that are undertaken by the village community on its own, out of local resources of manpower, materials and money. Both sets of programmes are vital; but the test of success of the Panchayats as an institution is the proportion which the second set of programmes bears to the first. The true significance of the Panchayat lies in its role in mobilising the contribution of the community. Where people are rightly approached, they have responded with labour and funds. Considerable efforts have been made under the First and Second Plans to achieve certain targets through voluntary contributions. There is need to intensify these efforts for the successful implementation of village plans.

✓ The First Plan had recommended that the village panchayat should become the agency for land management and land reform in the village.¹⁶ There are certain problems which none but the village panchayats can deal with; in particular, tenancy legislation which "frequently proved infructuous because of the lack of administrative arrangements for enforcing it." Though village panchayats have been established covering about 4 lakhs of villages and vested with a wide variety of civic, administrative and developmental functions, practically nothing has been done to associate them with the administration of land reforms. The work has generally been done exclusively through the official machinery and public participation has not been sought. Nor are the village panchayats associated with the preparation and maintenance of land records except in a few states.¹⁷ In principle, it would be desirable to use the sanction of the local authority and of local public opinion to make land legislation effective. But this presupposes a degree of homogeneity and cohesion which does not exist yet. The answer to this problem can be found only as more experience is gained.

It is clear that the village panchayat will have to be helped and guided in its new role, which adds development activi-

¹⁶ Report on the First Five-Year Plan, p. 196.

¹⁷ Reports of the Committees of the Panel on Land Reforms, *Op. cit.*, p. 187.

ties to those of local self-government. In this new responsibility for planning and development at the village, the panchayat should enlist the support and co-operation of all villagers. It is desirable to call into service and to strengthen the genuine village community feeling and to train village leadership. It is also necessary to provide training facilities for the staff required by the Panchayat. All this has to be done without introducing too much of officialdom in these local bodies. It is interesting to note that the Waghodia Village Improvement Co-operative Association, registered as early as 1932 in the Baroda District of the erstwhile Baroda State, conducted training classes for the President and members of the panchayats, and adult education classes as also organised agricultural and cattle shows and started village libraries. The Association did excellent work for the development of panchayats in the taluka.¹⁸ This can be done by the Taluka Boards if they are properly constituted. There is great scope for such associations and they need to be encouraged.

CO-ORDINATION WITHIN THE DISTRICT

As mentioned earlier, the Balwantray Mehta Committee recommended a three-tier scheme — Panchayat at the village level, *Panchayat Samiti* at the block level and *Zila Parishad* at the district level. The Committee was concerned primarily with the administrative machinery in the Community Development and N. E. S. areas. Hence it was natural for it to select the Block as the unit of planning between the District and the Village. The development of local self-government and the structure of administration itself is not uniform in different parts of the country. In some States like Bombay, the pattern of local self-governing institutions follows that of Governmental administration: the District Local Board, the Taluka Boards and the Village Panchayats. Where the areas of operation of the Block and the Taluka coincide there will be no difficulty in following the recommendation of the Balwantray Mehta Committee. But where these do not coincide, there might be advantage in retaining Taluka Boards and District Local Boards in States where they are already well-established and capable of taking over developmental work.

18 N. B. Desai: *Op. cit.*, pp. 226-227.

The Taluka Boards or *Panchayat Samitis* form a federal structure which at the Taluka level would act as a sort of foster body to guide the Panchayats with advice and assistance in every form and also to supply funds where inter-union works are undertaken. The "Union" would help the panchayats to undertake larger functions for the development of the area. This should be a statutory body working under the general direction and guidance of the District Local Board, getting advisory and organising staff and even funds from it. It should help the panchayats in the preparation of their budgets and see that they are properly implemented. It should be the duty of the Union to train the staff and village leaders. Most of the functions of the Block at Taluka level will have to be transferred to the Union along with their staff and funds as it shows capacity to deal with them. The Unions should be attached to the District Local Board. Other variants can also be thought of. The point is that whether it is the Block or the Taluka, and whether the agency is to be called by the name of *Panchayat Samiti* or by any other name, what is required is a co-ordinating structure for local administration and development. This supporting agency is a *sine qua non* for the growth of local self-government.

In the task of fostering the village panchayats and institutions for local development, the District Board can play an important part. The District Board, suitably staffed and equipped, could provide the expert guidance and effective supervision so necessary for the smooth working of village panchayats. It should be a deliberative body, preparing budgets and programmes and working through specialised committees. But the execution of programmes has to be carried out by a well-equipped and qualified secretariat, the head being nominated by Government in the initial stages as in the case of city municipalities. It should work as a supervising body. It should supply specialised staff for supervision and direction of the two lower strata and provide funds where inter-union works are undertaken. At this stage, the heads of the different Development Departments in the district should work together, plan out their programme and see that it is properly implemented. It is under these fostering organisations that the village panchayats should work if good results are expected of them. Under such a

federal structure the foundation of local self-government would be firmly laid.

While the functions and responsibilities of the local self-governing institutions will, no doubt, have to be strengthened and expanded, it is important to avoid multiplicity of agencies which come in the way of each other and lead to unnecessary duplication of work. The aim should be to make every Community Development Block, or the Taluka as the case may be, a focal point of co-ordination between different agencies of Government dealing with developmental work. In order to make the programmes of development effective, the administration of these programmes will need to be passed on to an increasing extent to institutions at the local level. The N. E. S. which has a promotional role at present, should be integrated with the local administration. It should work in collaboration with the co-operatives and the local bodies all along the line. It should devote its attention to agricultural production and help the low-income farmers. Ultimately, the N. E. S. might even merge with the co-operative movement. The need for close co-ordination between the community projects and national extension work on the one hand and the reorganisation of the co-operative movement on the other has been recognised at the Centre by the creation of a single Ministry for these purposes. This co-ordination should run down the entire line.

The working of these local bodies will create a number of problems relating to law, policy and execution and the efficiency of their working. At the State level there should be a Board of Local Self-Government to deal with these problems, to watch the progress of local bodies continuously, to take timely action and to see that they function properly with the active co-operation of the people themselves and get the assistance and guidance needed.

THE CO-OPERATIVE SOCIETY

The Panchayat is primarily concerned with civic functions, although it has an important role in fostering local development. It can provide the finance for development; arrange for supplies from outside and mobilise local man-power and other resources for tasks of common interest. The economic programmes for

the village have, however, to be left, by and large, to the initiative of the farmer himself; unless he is convinced that the facilities provided by the State are for his benefit and that the investments which he is required to make are likely to prove productive, little can be done to improve agricultural productivity. The farmer has to be brought actively into the co-operative movement if the problems of production, credit, supplies and marketing are to be solved satisfactorily. The aim should be to establish a multipurpose co-operative society in every village to cover all aspects of the villager's life. We already have a fairly developed (although by no means adequate) structure of co-operative credit in certain States. Co-operative marketing is also making headway. The task ahead is to extend the principle of co-operation so as to cater for all the needs of the farmer. The multipurpose society should look after not merely the credit and marketing needs of the farmers but also obtain fertilizers, improved seeds, improved implements and the other services which go to make farming an economic business. This, in our view, is fundamental for success in co-operative reorganisation.

We have referred in an earlier chapter to the recommendation of the Rural Credit Survey in favour of large-scale co-operative societies embracing more than one village and with active State partnership. The Survey took the view that the poor working of the co-operative societies in the country was due to their small size which, in turn, was responsible for smallness of membership and poverty of resources. The small societies, it was argued, could not afford trained managers or secretaries and had too little turnover for viability. Following the Rural Credit Survey's recommendations, an Integrated Scheme of Rural Credit with State partnership was drawn up. Some 6,000 large-sized societies were organised under that scheme by the end of 1958-59. Recently the official policy has veered back towards small societies, that is, societies which do not extend to more than three villages. The feeling has grown that larger societies, managed by paid officials, might be viable or efficient, but they would be too remote for the villager; they would function like State-sponsored agricultural banks rather than as a new cementing agency in which the villager participates actively. The National Development Council adopted a resolution in 1958 in pursuance of which a Working Group pre-

pared a report on co-operative policy. The revised policy reiterates the principle that "for the development of co-operation as a people's movement, it was essential that co-operatives should be organised on the basis of the village community as the primary unit, and that responsibility and initiative for social and economic development at the village level should be placed fully on the village co-operative and village panchayat."¹⁹ While the emphasis has thus shifted from large to small co-operative societies the official policy leaves room for flexibility. The fact that small village societies with an area of operation not exceeding three villages are preferred, does not mean that larger societies would have no place in the scheme hereafter. For backward and sparsely populated areas, for instance, where it might not be possible to organise a society in every village large-sized societies would be unavoidable. In a number of instances there will be a case for bringing together individual societies into a credit or marketing union. The approach to the size and organisation of co-operatives should be such as to permit variations to suit local conditions. Also, the village multipurpose society can function effectively only if it is linked to co-operatives higher up with larger resources.

It remains true, however, that the official policy in respect of co-operatives is in a state of flux. And this is one of the factors which has adversely affected the co-operative movement in recent years.²⁰ Such assessment as has been made so far regarding the relative advantages of large and small societies does not indicate any clear-cut results. One such assessment was a sample survey carried out by the Programme Evaluation Organisation (P.E.O.) in July-August, 1958.²¹ The main findings of the survey are given below.

SIZE AND NATURE

Most of the large societies surveyed were of recent origin. They were either newly created or formed by the amalgamation or reconstitution of small societies. The large societies are all

19 Report of the Working Group on Co-operative Policy, Ministry of Community Development and Co-operation, Government of India, 1959, p. 47.

20 Rural Credit Follow-Up Survey, 1956-57, General Review Report, Reserve Bank of India, Bombay, 1960, p. 547.

21 The Sixth Evaluation Report on the Working of Community Development and N. E. S. Blocks, P. E. O., Planning Commission, Government of India, 1959, pp. 05-124.

organised on the basis of limited liability while liability is un-limited in the majority of the small societies. The average large society has a membership of 418 persons and covers 11 villages while the average small society has 64 members and covers 2 villages. The former has a share capital of Rs. 14,232 as compared with the share capital of Rs. 1,921 of the latter. In terms of membership, area covered and share capital, the large society is thus on an average 5 to 7 times as large as the small society. The large societies are supposed to represent "not co-operation alone but co-operation in conjunction with Government." Government contribution is expected to be equal to the amount contributed by the members. Twenty out of the thirty-three large societies covered by the P. E. O. had received Government contribution amounting to 28.4 per cent of their share capital. The small societies did not normally receive such contribution from the Government.

In regard to coverage, neither category of society had at the time of the survey covered even a fourth of the households in their jurisdiction, and the large societies had hardly done better than the small ones. The composition of membership revealed that the large societies had not reached the smaller cultivators more effectively than the small ones; in fact, small cultivators constituted a smaller proportion of the membership of the large societies, the respective percentages being 35.6 and 42.3. The large societies seemed to have attracted the landless workers much more than the small society. The proportion of landless members in large societies increased from 17 per cent in 1957 to 27 per cent in 1958, while in small societies, it remained more or less the same, about 18 per cent.²²

In regard to the provision of credit facilities, in a number of blocks, the marginal credit limit is higher for members of large societies than for members of the small ones. As the credit limit is normally fixed by reference to the land owned or held by the borrower, the landless labourer and the artisans have small chance to get loans from the society. The discrimination in favour of land-

22 The data on this category of members should be interpreted with caution as in some instances members who are well-off and do not resort to borrowing as well as small traders have been classified as landless. See the Six Evaluation Report on Working of Community Development and N. E. S. Blocks, *Op. cit.*, p. 111.

owners and against tenants persists and the large society is not better than the small society in this respect. Only in a few cases is the credit limit related to the crop produced—although this was a major recommendation of the Rural Credit Survey report—and even in these cases neither the cost of cultivation nor the productive requirement of the cultivator were taken fully into consideration.

It may be noted that in none of the sample studied by the P. E. O. was credit linked with marketing. As regards advance to members, during 1957 and 1958, the total loan given by the large society was, on the average, 6 to 8 times as large as that by the small society. But the proportion of members who received loans was more or less the same in both types of society, being 56.1 per cent in the case of large and 57.1 per cent in the case of small societies in 1958. The amount of loan advanced per member was somewhat higher in the large societies, being Rs. 282.6 as compared to Rs. 244.8 in the case of small societies in 1958. In both categories of societies a smaller percentage of small cultivators than of the big farmers could secure loans from the societies during 1956-58. The large societies do not seem in this respect to have a better record than the small.

The P. E. O. survey was confined to societies other than those covered by the Reserve Bank's Integrated Scheme of Rural Credit. Some information regarding the societies covered by the Scheme is, however, available in the Rural Credit Follow-Up Survey. The working of many of the large-sized societies was satisfactory. In many small societies the quality of performance was generally poor. The survey also found that the performance of co-operatives was better generally in areas where the crop loan system was prevalent, the number of large societies was high and where attempts were made to introduce the Integrated Rural Credit Scheme. The scale of operation of the society was not the sole determinant of successful working. The multi-village societies which had sizeable financial resources were also societies which could employ full-time trained secretaries and could show better progress in regard to membership, loan operations and recoveries.²³ A full

23 Rural Credit Follow-Up Survey, General Review Report, *Op.cit.*, pp. 554-556.

assessment of the working of the Scheme has yet to be done, but it may well show that the success of a co-operative society depends not so much on its size as on the variety of its operations. The larger the area of the farmer's economic life that the society covers, the stronger will be its position in the village and also more fruitful will it be to the farmer.

MULTIPURPOSE CO-OPERATIVES

The idea of a multipurpose society is not new; it has been before the country ever since Sir F. Nicholson submitted, in 1895, his monumental report on Land Banks in India. The rules of most of the primary societies which were based on the Raiffeisen model, provided for multipurpose activities but in practice the development of co-operative movement in India has been largely confined to credit societies. There were, however, exceptions such as the Kodinar taluka of the erstwhile Baroda State where multipurpose co-operative societies were started as early as 1912. A detailed account of the experience of this is given in Sir Manilal Nanavati's memorandum on the subject,²⁴ and in the survey of the co-operative movement in Kodinar prepared by the Indian Society of Agricultural Economics in 1952.²⁵ During the inter-war years there was considerable discussion on the *pros* and *cons* of the multipurpose society.²⁶ During the second World War the imposition of controls and rationing gave some scope for further development of the multipurpose idea and consumers' co-operatives undertook the distribution of rationed commodities in a number of towns. But this turned out to be a temporary phase and with the removal of controls, the societies reverted back to their original credit functions. The Rural Credit Follow-Up Survey (1956-57) also found that instances of the linking of credit with marketing were few. In fact, the limited success of the co-operative movement in India shows that the real basis of the co-operative movement has to be multipurpose societies. In Japan, the multipurpose societies have worked exceedingly well. The co-operative system in that country is made up of three levels,

²⁴ A Note on the Organisation of the Kodinar Banking Union by Sir Manilal B. Nanavati (published in the 4th Edition of this Book).

²⁵ *Vide* Co-operation in Kodinar.

²⁶ Bulletin on Co-operative Village Banks, Agricultural Credit Department, Reserve Bank of India, 1937; Resolutions of the Registrars' Conference at Delhi, 1941.

namely, unit co-operatives at the village level, federations at the prefectural level and central organs at the national level. Such a federal structure strengthens the co-operative movement and helps to provide the village societies with technical and other assistance. The village societies in our own country also need such high level agencies to help them realise the multipurpose idea.²⁷ Current official policy has also stressed²⁸ the importance of establishing service co-operatives in all the villages to take over the supply of tools, fertilizers and other facilities required by the cultivator as also of linking credit with marketing. In fact the protagonists of large and small societies alike as well as those who hold opposite views on the question of co-operative farming are all agreed in one respect, namely, the need to establish service co-operatives. Such societies can form a basis for further advance in the direction of co-operative farming, but any expectation that the Indian farmer will accept co-operative farming without a convincing demonstration of its benefits is unfounded.

The co-operative movement has to be developed so as to bring within its fold all rural families. A programme for the revitalisation of existing small co-operative societies was introduced in 1957-58. It was recommended that State Governments should make special efforts to revitalise existing agricultural co-operative societies with a view to increasing the membership from 9-10 million to about 15 million by the end of the Second Plan. The greater part of this increase in membership is to be achieved by intensifying the work of these societies in the villages served by them. There are, however, villages which are at present not served by any co-operative society. As a matter of first priority, co-operative societies should now be established in such villages. It is necessary to ensure that before the completion of the first stage of the community development programme in any block, the necessary co-operative and village institutions are established in all villages — suitably grouped where necessary.

It was also recommended that along with service co-operatives there should be a Union — a federal association of societies —

²⁷ Vide "Rethinking on Rural Credit" by Sir Manilal B. Nanavati, *The Indian Journal of Agricultural Economics*, Vol. XII, No. 1, January-March 1957.

²⁸ Vide Report of the Working Group on Co-operative Policy, *Op. cit.*, pp. 11-12.

to support them. This suggestion seems to have received hardly any attention. The village societies are weak and may not be able to carry out the main multipurpose objective unless they have nearby their own institution to help and guide them in various complicated operations of agriculture. This Union can undertake collective sales and collective purchases of agricultural commodities on a cash basis without undertaking any risks of trading. The District Co-operative Banks are not interested in anything else than provision of finance. Marketing societies are few and where they are working, they operate in limited spheres. The Union could be so framed as to serve the purpose of a supervising agency for the primary societies. At present, supervisory and inspecting staffs are too many and are concerned with the performance of routine duties. They are not interested in the most difficult work of creating a genuine co-operative society, wherein the people would sponsor and run the movement. This is a hard task which requires continuous attention in order to generate a proper co-operative spirit among the conflicting elements in village life. It is because of the lack of an intelligent and practical policy that we have on hand more than one lakh 'C' class societies, which may be called neither good nor bad—without any real life but just managing to survive. This is the result of creating societies by order and the same would be the result in the future unless proper care is taken to rehabilitate the old societies or start new ones on the right lines.

At present many agencies provide credit and other facilities to the rural population. Co-operatives advance loans and also provide various services; State Governments also give *taccavi* loans and provide various facilities; the Community Projects Administration has separate funds which are also made available to the rural population. It is essential to make all these facilities available to individuals through one agency, *viz.* the co-operative and thereby to create conditions in which every peasant and rural worker will find it to his advantage to join the village co-operative.²⁹

Under present conditions, there are three ways in which the village people may be financed. Big cultivators who are pros-

²⁹ Report of the Working Group on Co-operative Policy, *Op. cit.*, pp. 43-45.

perous can now approach the commercial banks for finance. Their needs are large and the ordinary societies cannot provide them with adequate finance. The State Bank of India and other commercial banks have spread out considerably in the country-side and they should be able to cater to the needs of this class. Where the people are fairly educated and can form societies, multipurpose co-operation is the solution. It would take some time to generate the co-operative spirit among them but if wisely guided and properly helped in all their needs and requirements they would come out well in course of time. Where people are unable to form societies as in tribal or other backward areas, Agricultural Banks for a Taluka or even a smaller area should be started dealing directly with individual members.

We have noted earlier that the co-operative movement has been conceived narrowly and it has not paid sufficient attention to agricultural production. Though supply of credit is an important aspect of the movement, it is equally necessary to pay due attention to the aspect of agricultural production. There is also the need to bring about a measure of co-ordination between the agricultural department and the co-operative department in the States for the realisation of the full benefits of co-operation.

As important as the economic aspect is the social aspect of rural life. Education, health, social attitudes and customs, utilisation of leisure, etc., have an important bearing on the economic progress of the rural families. Expensive religious and social customs have been a major cause of indebtedness among many cultivating families.³⁰ Properly planned educative propaganda would go a long way in bringing down this expenditure. It is reassuring to note, for example, that the Karadia community in the Kodinar taluka of the Amreli District in the former Baroda State, has framed elaborate rules for regulating the social expenses of their community, and has given an excellent lead in reforming caste rules and customs. The scope of this organisation has been expanded to members living outside Kodinar also. Most of the leaders of this organisation are also the leaders of the co-

30 *Vide* Bhuvel: Socio-Economic Survey of A Village, Indian Society of Agricultural Economics, Bombay, 1949, Chapter 9 — "Social Life," pp. 107-117.

operative movement.³¹ These social aspects should be a part of the "better life" creed of the co-operatives. Because the drive comes from the local leaders alone, its effect will be felt not only temporarily but on a lasting basis.

The development of co-operation on the lines suggested above would require organisation of extensive training programmes for personnel servicing the co-operative departments and for village level workers and other extension workers. A beginning has been made in this direction and schemes for training have been initiated through the Central Committee for Co-operative Training set up by the Government of India and the Reserve Bank of India in 1953, the All-India Co-operative Union, the State Co-operative Unions and Institutes and District Co-operative Unions wherever they exist. The Co-operative Departments have also to be strengthened with a view to bringing into the field of co-operation a larger number of competent and experienced officials. The services of an increasing number of non-official honorary workers have also to be enlisted so that the co-operatives retain their dynamism.

Besides, there is need for simplifying the present procedure for registration of co-operative societies, grant of loans and management of co-operatives. The development of co-operation as a popular movement is impeded by some of the existing procedures. As a result small groups and communities cannot function freely and organise their work and activities along co-operative lines because of excessive official interference and red-tape. The restrictive features of the existing co-operative legislation have to be removed. Although some attempts in this direction have recently been made, there is scope for improvement.

It would be idle to deny that the problems of finance and organisation of the co-operative movement in all its stages are complex. To some of these problems, an answer will have to be found not in terms of abstract principle but in the light of what will work best. But, in whatever changes or adaptations are thought of, the fact must be borne in mind, namely, that the co-operative movement has wider objectives than the extension of

³¹ Co-operation in Kodinar, 1952, pp. 35-37

this or that facility to the farmer. Co-operation is a way of life, and its educative and social value is no less important than its economic implications. Rightly conceived and directed, the co-operative movement can be a very potent organisation for rural development. There is, in fact, no other solution which can ensure growth from within and a strengthening of democratic values for the mass of the people.

THE SCHOOL

While the Panchayat is the civic and administrative agency for the village as also the link with upper administration, and the co-operative society would look after the economic and developmental needs of the village, the school should help in improving the larger social and cultural background of the village. In the task of development, it is necessary to pay attention not merely to the immediate needs of the community but also to the building up of a healthy and intelligent future generation. The success of social and economic institutions depends ultimately on the quality of people who man them; and it is through education and training that the necessary enthusiasm and capacity for economic and social work can be created. It would not suffice to take a narrow view of education as mere book learning of the type that has tended to vitiate the educational system in this country. Of course, widespread illiteracy is an obstacle in the way of the spread of new ideas. The Directive Principles of the Constitution provide for free and compulsory education to all children below the age of 14 by 1961. The various targets set by the Planning Commission in this regard and the progress made so far have been reviewed in an earlier chapter. It is sufficient to note here that within this larger programme of spread of education, specific attention must be given to the development of the right kind of schools at the village level.

The village school must be the centre of enlightenment and culture for the locality. It must provide not only for education in the three R's but also for vocational training. The environs of the village, the kinds of soil, the processes of agriculture, the uses of irrigation and electricity, the technical improvements in farming implements and tools, in fact, all problems with which the village boy is in living contact should be dealt with in the school. The school must have a well-organised library and it should be well-

equipped with tools and materials for study. Education should be integrated with productive labour, and mental with physical labour. In this connection, the system of education followed in China and Japan is of great interest. In Chinese schools, students spend part of their time on studies and the rest on productive work. In Japan, where the educational system is controlled by the Central Government, besides general education, moral education is compulsory at every stage of education and at the primary level special text books are prepared for the purpose. The topics dealt with are very broadly conceived. The results of this system of instruction are well reflected in the discipline and the co-operative spirit the people show in their life. Such a system of moral education should be introduced in all our educational institutions by the Central Government, although, this is more a matter of the way instruction is imparted and the right values inculcated than of any direct teaching of morals or ethics. There is much to commend in the idea of basic schools which impart training to students in basic crafts besides teaching them the mother tongue, the national language, mathematics, social studies, general science, drawing, music, etc. The existing primary schools have to be oriented towards the basic pattern. Apart from the education of children, the school should make arrangements for the education of adults; in both the spheres, there is need for publicity and propaganda through film and radio and other visual aids. Exhibitions, fairs, etc., which may be organised by the various agencies doing welfare work in the rural areas could be linked up with the school, which would thus come to occupy a central place in the intellectual activities of the area. A good school has been defined as one which develops fully and harmoniously the body, the mind and the soul. This is no easy task. Fine phrases like spiritual instruction and character-building may be used to conceal an attempt at casting the minds of the pupils into a fixed mould and cramping their capacity for free thought. These are questions for the expert educationist and philosopher. The point is that the school must impart instruction in such a way as to link it up with real life; it must have ample facilities for creating in the pupils the new outlook on life which is fundamental to economic and social development. In this connection, it is essential to provide taluka polytechnic schools which would help to relieve the pressure of population on land. It would also be desirable to constitute a Taluka Tea-

chers' Board so that the teachers can frequently discuss their problems of teaching in general and of the cultural activities in their villages.

Above all, the school is the nursery for the citizen of the future. The main task in this regard is to inculcate among the children the sense of national unity and solidarity. India is a country of many diversities, and yet, behind these diversities, there is a unity — not of outward conformity — but of inner outlook and values — which has enabled it to survive through periods of difficulty and stress. Education in the U. S. A., which is a nation comprising diverse elements, has brought about a sense of national unity and purpose. In India, the task is not only one of securing material progress but of bringing about social integration among the castes and classes which tend today to live in rather separate, isolated compartments. The basis for this integration is the School. The object of all reform and of developmental effort is to build better men, and that involves in the last analysis the awakening and strengthening of the latent creative urges in the younger generation.

EPILOGUE

Now, as we come to the end of our task, the question that remains uppermost in our minds is: What role has agriculture to play in Indian economic development? And how best can we proceed?

We have given the facts. We have traced the progress of official policies and the lines along which non-official agencies have been trying to tackle the vast problem of bringing within the reach of India's rural masses a certain minimum standard of comfort and of access to new knowledge and techniques. The inadequacy of what has been done is obvious and needs no reiteration. We have tried to indicate the major lines of reform and reconstruction, taking good care to emphasise the fact that nothing less than all-round planning, embracing all aspects of life and taking in all strata of population, can help us to reach the desired goal. It is not intended now to catalogue over again the various concrete suggestions we have made in the course of this work, but it would be useful perhaps to stress the point that the problem of the economic betterment of India's millions is not only colossal in magnitude but is highly complex, so that its solution will demand a vast, continual and manysided effort in which the Central and State Governments and the public at large will have to co-operate.

Ours is not a new country to be settled. There is a tradition of centuries to be considered; there are layers upon layers in our economic and social system which have to be dealt with, with due regard to the requirements and possibilities of each. There are regional variations, there are political diversities, and there are diversities of culture and educational attainment also. These cannot be ignored. We must work out our policies with due regard to all these, bearing in mind that while we seek to raise the general standard of life, we must also lay special stress on the development of under-developed areas and of poorer and therefore more backward sections of the people. Economic and social development must not be thought of merely in terms of aggregates, or averages, but in terms of small sections of the people, of local areas and of local self-reliant, co-operative communities.

From the point of view of development, a major desideratum is a change in the occupational pattern away from agriculture and

in favour of industry, trade and auxiliary services. We have seen earlier that there has been little change in this pattern as a result of the developments that have taken place under the first two plans. Judged in terms of the occupational pattern, the Indian economy has just begun to feel the impact of expansionary forces. The process of evolving a more balanced occupational structure must necessarily be spread over a period of years. But it may be stressed that if the real income levels of the farming community are to be improved, it is imperative that the number of those who share in the net proceeds of agriculture diminishes substantially. Technological considerations permit this and social considerations point the same way. It is only thus that the economy as a whole can be made dynamic and progressive.

It is obvious that economic development requires a continually expanding output of agriculture. The increase in agricultural output cannot come from new land, of which there is very little. It has to be obtained through more intensive and more efficient cultivation. The Community Development and N. E. S. programme has helped in making the rural population receptive to new ideas. With the further extensions of this programme envisaged in the Second and Third Plans, the prospects of a continuous and sizeable increase in agricultural productivity in the years to come must be adjudged as good.

Whether we view the development process from the point of view of increasing aggregate output or from the point of view of increasing employment opportunities, very large increases in output and investment in sectors other than agriculture are called for. Agricultural production has to be increased in absolute terms mainly through a rise in productivity rather than in employment; the other sectors have to expand both output and employment. Investment-output as well as investment-employment ratios in the latter are generally high so that unless savings on a big enough scale are available in the system it would be very difficult to provide for sufficient increases in output and employment in them. The problem thus is to break the isolation of agriculture and to develop all sectors of the economy in a balanced way.

Thus, the role of agriculture has to be fitted into the overall programme of development which necessarily means a diversification

of the economic structure through investments elsewhere. Investments in agriculture proper have to be, in the early stages, labour intensive and they have to be aimed at increasing the efficiency of the existing labour force through better seeds, implements, fertilizers and the like. For sustaining investment at the high levels required, savings have to be generated both in the agricultural and in the non-agricultural sectors. It is, however, imperative that as large a part of the public funds should be devoted to the development of agriculture and to raising the real incomes of agricultural classes. At the same time there is urgent need for the agricultural sector itself to finance as much of its developmental programmes as possible from out of its own unutilised labour power and from new incomes generated by development. It is also necessary to ensure that the larger incomes resulting from the increased productivity thus brought about are not all spent on consumption and a reasonable proportion is utilised for further capital accumulation. We can also draw upon the large reserves of man-power in the country through a proliferation and diversification of economic activities in the rural areas. This is well recognised in our plans and a good beginning has been made in the direction of mobilising local labour and resources through the community development programmes and local development works. The process of agricultural development, however, is in itself complementary to and firmly linked with the process of industrial development which draws the surplus labour from rural areas to rising urban centres.

Agriculture can make an effective contribution to the development process through co-operative organisation in production, and through complementary measures in the fields of marketing, credit, education, extension and through the adoption of newer techniques and improvement. Agrarian reform is an inseparable part of agricultural development and a pre-requisite for the increase of agricultural productivity. Land reform is not only a reform of the way land is held, but just as much an improvement in the human agencies operating on the land. The institutional and organisational aspects of the rural problem deserve, in a word, no less attention than the so-called "inputs" by way of productive facilities. Economic development is but a facet of the wider problem of raising the intellectual and cultural levels of the population.

The rural economy, as we know it now, is the product of a long historical process and the problem of rural reconstruction has many aspects. It is, therefore, of the utmost importance that the plans of development take carefully into account the broad sociological forces operating in the economy. Planning is not merely a matter of adjusting resources to needs, or schemes to resources; nor is it a mechanical compilation of targets, regional or sector-wise. Essentially, it is a process of initiating the right kind of economic, social and administrative changes and maintaining the right tempo, with clearly defined objectives for each stage of the plan. An approach to this problem has been indicated in Part III of this book "Constructive Rural Sociology—Towards a Planned Economy."

The basis of all planning is an efficient administrative system, a system which is animated by the desire to promote development rather than merely to maintain law and order. This is a truism, which has, nonetheless, to be stressed. The practical task of re-orientating the administrative system along new lines is not simple. Experience of the last few years has shown how multitudinous are the tasks which the administrative system of a welfare State has to undertake. The necessary personnel has to be trained up and new techniques of regulation and control have to be developed. It is important in this connection that the lowest links in the administrative chain are strengthened, so that at the points where the administration comes into contact with the people, it is seen not as a body of men wielding power and collecting taxes but as an agency providing guidance, encouragement and assistance, financial and other, in the task of making life better. In this task, the extension service has to reach down to the village and to the individual villager. This service has to bring to the farmer or the village artisan the co-ordinated assistance of all development departments. It is evident that the capacity of the administrative system to meet the new demands on it in the next few years will bear vitally on the pace of progress for a much longer period ahead.

The contribution of the State in stimulating economic growth should be substantial; and this contribution must be so devised and implemented as to quicken the elements of growth from within for the people themselves. The development of under-developed economies by conscious effort and along democratic lines is a new

problem, for the solution of which there is hardly any precedent yet. This problem may well be regarded as the crucial problem of the second half of the twentieth century. The political awakening of Asia and of Africa is a new factor in the world situation; this awakening must be reflected in economic development. In the accomplishment of the new tasks, it will be necessary to develop new lines of thinking and new institutional set-ups.

It must, however, be added that the solution of many of these problems depends not on mere institutional changes but on the underlying spirit which gives meaning and purpose to changes in form. Each country has to evolve its institutions in response to its own needs and traditions; and the key to success lies in proceeding step by step, continually adapting and readapting ideas and institutions, trying them out on the ground, leaving room always for fresh experiments. Institutions are, after all, a means; the end is the development of human personality.

To conclude: there are not merely vast natural potentialities in this country; there is also plenty of talent and capacity for hard work and sacrifice. So far, all these have not been mobilised fully. If India's resources, natural and human, are marshalled and directed along right channels, there is every reason to be hopeful about the future of Indian agriculture. The Indian rural problem is a challenge to the Indian public at large and it is a challenge that can be met only when there is sufficient awakening and readiness to work and sacrifice on the part of all concerned. Granted this basic requirement, all other considerations, funds, technical equipment, expert knowledge, are secondary; they will come. Others have done it before us. We in India also can, and we must. There is no scope in this approach to dogmas or rigid ideologies. The practical answers to problems have necessarily to be found pragmatically. As the nation proceeds, it will continually discover new springs of action, new avenues to success and new ways of organisation and achievement. In the last few years, the Indian economy has taken some important steps forward. With steady pursuit of the basic democratic ideals we have accepted, and with a balanced choice as between the diverse objectives and means or methods of further advance, there is every hope that India will emerge before long as a prosperous and progressive nation.

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